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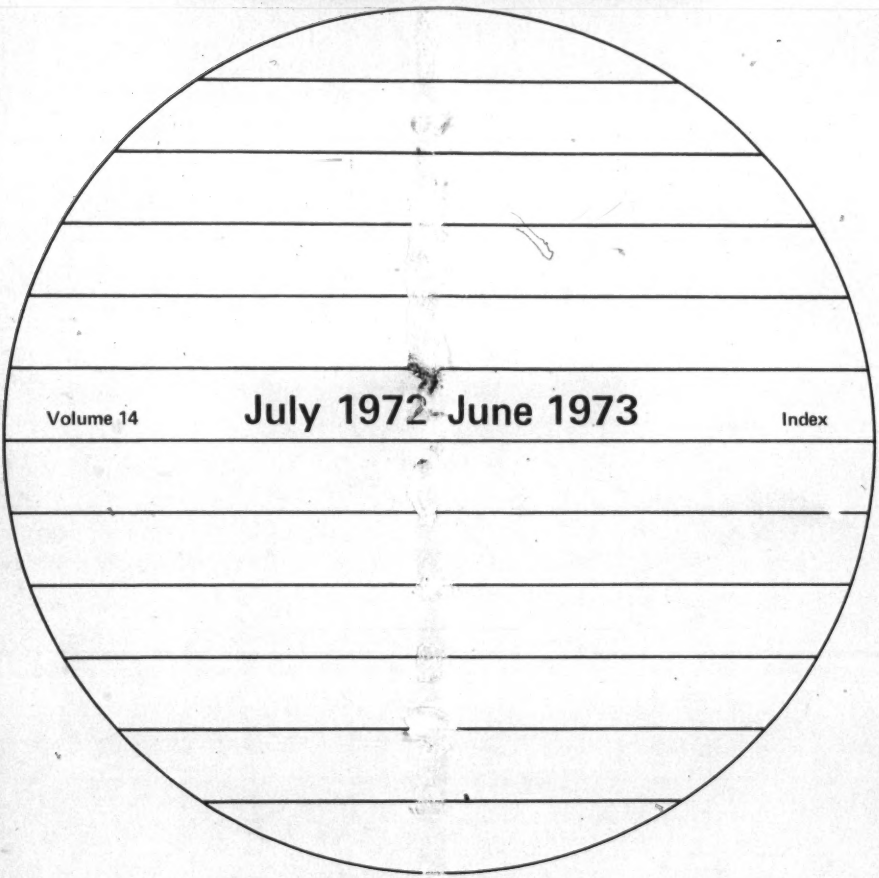

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5.10.30.40. Defects in General

Localized and Quasilocalized Vibrations in Anharmonic Raman Spin–Lattice Relaxation (T)—V. Ya. Zevin and V. I. Konovalov. 14(3), 738–42 (Sep. 1972); CPM-7209D0172

5.10.30.50. Color Centers

Electron–Microscope Detection and Optical Investigation of Exciton Decay Products in KBr Crystals (E/T)—Kh. R.–V. Iygi, Ch. B. Lushchik, A. F. Malysheva and E. S. Tiisler. 14(1), 95–100 (Jul. 1972); CPM-7207D1054

Electron–Nuclear Double Resonance of the Triplet State of M Centers in KCl (E/T)—Yu. V. Fedotov, N. N. Bagmut and I. V. Matyash. 14(2), 519–20(C) (Aug. 1972); CPM-7208E0676

Mechanism of Radiation–Induced Coloring of KCl:Ag Crystals (E/T) —N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(3), 753–6 (Sep. 1972); CPM-7209D0187

Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

Structure and Conversion of Hole Centers in KCl(NaCl) Crystals (E) —P. K. Gorbenko and A. A. Kovtun. 14(4), 1046–7(C) (Oct. 1972); CPM-7210D0861

Flow–Stress Spectroscopy of NaCl Crystals Containing Color Centers (E)—G. A. Ermakov and É. M. Nadgornyi. 14(4), 1101–3(C) (Oct. 1972); CPM-7210D0916

Deformation Luminescence of KCl.Ag Crystals (E)—I. A. Markova–Osorgina, F. D. Senchukov and S. Z. Shmurak. 14(5), 1236–8 (Nov. 1972); CPM-7211A1488

Flashes of Luminescence on Unloading Plastically Deformed Alkali Halide Crystals (E)—F. D. Senchukov and S. Z. Shmurak. 14(5), 1336–7(C) (Nov. 1972); CPM-7211A1588

Color Centers in a Heterojunction (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(6), 1531–2(C) (Dec. 1972); CPM-7212D0867

Formation of F Centers in Oxygen–Doped NaCl Crystals (E)—R. I. Didyk and N. A. Tsal'. 14(6), 1596–8(C) (Dec. 1972); CPM-7212D0932

Properties of F'_2 Centers in Defect Crystals with Ionic Type Bonding (T)—E. P. Prokop'ev. 14(10), 2520–1 (Apr. 1973); CPM-7304E1166

Periodic Dichroism of Colored Alkali Halide Crystals Introduced by Plastic Deformation (E)—V. M. Bezruchko. 14(10), 2527–30 (Apr. 1973); CPM-7304E1173

Behavior of Alkali Atoms Introduced into the Xenon Lattice (T)—M. A. Belogolovskii and K. B. Tolpygo. 14(10), 2571–4 (Apr. 1973); CPM-7304E1217

Relaxation Phenomena in Additively Colored KBr Crystals (E)—N. G. D'yachenko, A. V. Tyurin and A. S. Sheveleva. 14(10), 2648–9 (C) (Apr. 1973); CPM-7304E1294

Electrically Stimulated Inversion of Photoconductivity in a Heterojunction Containing Color Centers (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(11), 2860–2 (May 1973); CPM-7305D1088

Tunnel Ionization of Excited In^+ Centers in KCl:In (E)—V. I. Leiman. 14(12), 3057–60 (Jun. 1973); CPM-7306D0899

5.10.30.60. Interstitials and Vacancies

Inelastic Scattering of Slow Neutrons by Localized Vibrations of Interstitial Atoms (T)—I. P. Dzyub and V. Z. Kochmarskii. 14(1), 1–8 (Jul. 1972); CPM-7207D0960

Vacancy Equilibrium and Thermal Expansion of Tungsten at High Temperatures (E)—Ya. A. Kraftmakher. 14(2), 325–7 (Aug. 1972); CPM-7208E0482

Positron Centers in Defective Ionic Crystals (T)—A. Z. Varisov and E. P. Prokop'ev. 14(2), 493–5(C) (Aug. 1972); CPM-7208E0650

Equilibrium Configuration of Vacancies in Si and Ge (T)—V. A. Panteleev and V. I. Okulich. 14(2), 523–4(C) (Aug. 1972); CPM-7208E0680

Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6(C) (Aug. 1972); CPM-7208E0711

Spatial Decoration of Defects in CaI Crystals (E)—N. L. Sizova, M. O. Kliya, V. N. Rozhanskii and A. A. Urusovskaya. 14(3), 743–6 (Sep. 1972); CPM-7209D0177

Quantum States in Structures with Two Types of Point Defects (T)— A. S. Dolgov. 14(4), 842–4 (Oct. 1972); CPM-7210D0657

Ionization of In^+ and Tl^+ Centers in KCl and KBr Crystals by Interstitial Halogen Atoms (E)—I. K. Vitol, V. Ya. Grabovskis, S. G. Zazubovich and Ch. B. Lushchik. 14(4), 894–8 (Oct. 1972); CPM-7210D0709

Stability of Anharmonic Crystals with Vacancies (T)—V. L. Aksenov. 14(7), 1718–22 (Jan. 1973); CPM-7301C0678

Focusing Influence of Vacancies on the Propagation of Atomic Collision Chains. Elongation of Chains (T)—É. Ya. Mikhlin and V. V. Nelaev. 14(7), 1866–8(C) (Jan. 1973); CPM-7301C0826

Diffusion and Solubility of Co in GaAs (E)—G. S. Kulikov and I. N. Nikulitsa. 14(9), 2335–8 (Mar. 1973); CPM-7303E1159

Influence of the Decay of Si–Cu, Si–Ag, and Si–Au Solid Solutions on Defect Formation in Silicon (E)—T. D. Dzhafarov and T. T. Dedegkaev. 14(9), 2352–6 (Mar. 1973); CPM-7303E1176

Theory of Quasistationary Reactions between Point Defects in Crystals (T)—V. L. Vinetskii and I. I. Yaskovets. 14(10), 2605–9 (Apr. 1973); CPM-7304E1251

Kinetics of Decrease in the Concentration of Nonequilibrium Cation Vacancies in KBr:Ba^{2+} Crystals (E)—G. A. Andreev, L. G. Buritskova and G. B. Semushkin. 14(10), 2640–1(C) (Apr. 1973); CPM-7304E1286

5.10.30.65. Other Point Defects

Effect of Number of Fe^{2+} Exchange Linkages on Local Magnetic Fields at Fe^{57} Nuclei in the System $YFe_{1-x}Al_xO_3$ (E/T)—V. F. Belov, T. A. Khimich, M. N. Shipko and M. I. Dakhis. 14(2), 437–40 (Aug. 1972); CPM-7208E0594

Quantum States in Structures with Two Types of Point Defects (T)—A. S. Dolgov. 14(4), 842–4 (Oct. 1972); CPM-7210D0657

Theory of Quasistationary Reactions between Point Defects in Crystals (T)—V. L. Vinetskii and I. I. Yaskovets. 14(10), 2605–9 (Apr. 1973); CPM-7304E1251

5.10.30.70. Dislocations

Anomalous Transmission of X Rays by Silicon Single Crystals Containing Dislocations (E)—É. G. Sheikhet, O. N. Efimov and N. V. Veselovskaya. 14(1), 223–4(C) (Jul. 1972); CPM-7207D1182

Influence of Structure Defects on the Electrical Properties and Luminescence of α-SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206

Influence of Placing Dislocations at Starting Positions on the Kinetics of Dislocation Motion in NaCl Crystals (E)—V. A. Makara, N. N. Novikov and O. V. Rudenko. 14(1), 261–3(C) (Jul. 1972); CPM-7207D1220

Mechanical Properties and Dislocation Structure of Alkali Halide Crystals in Single Slip (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(2), 487–9(C) (Aug. 1972); CPM-7208E0644

Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

Photoelectric Absorption and Diffuse Scattering in the Anomalous Transmission of X Rays in Ge Crystals (T)—É. G. Sheikhet and O. N. Efimov. 14(3), 625–7 (Sep. 1972); CPM-7209D0059

Influence of the Deformation Method on the Nature of Dislocation Loops in Aluminum (E)—M. M. Myshlyaev, S. S. Olevskii, S. K. Maksimov and V. A. Likhachev. 14(3), 785–6(C) (Sep. 1972); CPM-7209D0219

Accumulation of Dislocations in Random Fields of Internal Stresses and the Initial Stage in the Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(4), 920–6 (Oct. 1972); CPM-7210D0735

Effect of Mechanical Stress on the Shapes of Dislocation Etch Pits in Silicon (E)—V. A. Mal'tseva, B. D. Platonov, S. Yu. Sofronova and Ya. M. Bekker. 14(4), 1053–4(C) (Oct. 1972); CPM-7210D0868

Interaction of Stress Waves with a Boundary in an LiF Bicrystal (E)—I. S. Guz' and G. S. Demina. 14(4), 1087–8(C) (Oct. 1972); CPM-7210D0902

Flow-Stress Spectroscopy of NaCl Crystals Containing Color Centers (E)—G. A. Ermakov and É. M. Nadgornyi. 14(4), 1101–3(C) (Oct. 1972); CPM-7210D0916

Radiation of Rayleigh Waves by Edge Dislocations Emerging at the Surface of a Crystal (T)—V. D. Natsik and A. N. Burkanov. 14(5), 1111–6 (Nov. 1972); CPM-7211A1363

Structure of Small-Angle Torsion Boundaries in the (001) Plane (E)—V. S. Postnikov, K. S. Solov'ev, V. M. Ievlev, I. V. Zolotukhin and Yu. K. Netusov. 14(5), 1311–2(C) (Nov. 1972); CPM-7211A1563

Flashes of Luminescence on Unloading Plastically Deformed Alkali Halide Crystals (E)—F. D. Senchukov and S. Z. Shmurak. 14(5), 1336–7(C) (Nov. 1972); CPM-7211A1588

Effect of Dislocations on the Anomalous Transmission of X Rays in Zn and KCl Crystals (E)—É. F. Chaikovskii and L. B. Zagarii. 14(5), 1340–1(C) (Nov. 1972); CPM-7211A1592

Determination of the Starting Stresses of Dislocations from Etch Figure Rosettes (T)—R. I. Garber and V. M. Mikhailovskii. 14(5), 1342–3(C) (Nov. 1972); CPM-7211A1594

Effect of Dislocation Broadening on the Shape of a Nuclear Magnetic Resonance Line (E)—Yu. A. Grinchenko and B. L. Timan. 14(6), 1404–7 (Dec. 1972); CPM-7212D0740

Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744

Fine Structure of a Moving Superdislocation (T)—V. T. Neumerzhitskii and É. V. Kozlov. 14(6), 1428–30 (Dec. 1972); CPM-7212D0764

Investigation of the Dislocation Structure of Stretch-Deformed Copper Whiskers by Analysis of Lattice Disorientations (E)—V. S. Postnikov, A. M. Belikov, A. T. Kosilov and V. B. Shepilov. 14(6), 1529–30(C) (Dec. 1972); CPM-7212D0865

Influence of a Dislocation Forest on the Parameters of the Dislocation Structure of Slip Bands in LiF Crystals (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(6), 1585–7(C) (Dec. 1972); CPM-7212D0921

Experimental Investigation and Calculation of the X-Ray Diffraction Contrast of a Single Dislocation (E/T)—V. I. Polovinkina, É. V. Suvorov, F. N. Chukhovskii and A. A. Shmol'berg. 14(7), 1699–702 (Jan. 1973); CPM-7301C0659

Kinetics of the Photoplastic Effect and Its Dependence on Orientation (E)—Yu. A. Osip'yan and I. B. Savchenko. 14(7), 1723–5 (Jan. 1973); CPM-7301C0683

Decreased Dislocation Density in Crystals Due to the Effect of Ultrasonic Vibrations (E)—I. A. Gindin, O. I. Bolchok, G. N. Malik and I. M. Neklyudov. 14(7), 1828–9(C) (Jan. 1973); CPM-7301C0788

Influence of Space Charge on the Strength of Small-Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Doroshenko, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5(C) (Feb. 1973); CPM-7302E1230

Electromechanical Effect on Ionic Crystals (E)—N. V. Zagoruiko, V. I. Savenko and N. N. Bekkauer. 14(8), 2120–2(C) (Feb. 1973); CPM-7302E1246

X-Ray Diffraction Investigation of the Substructure of Iron Microcrystals (E)—I. P. Kushnir and E. F. Sidokhin. 14(8), 2129–30(C) (Feb. 1973); CPM-7302E1255

Defects in Semiconducting Silicon Carbide Crystals (E)—A. S. Tregubova and I. L. Shul'pina. 14(9), 2305–8 (Mar. 1973); CPM-7303E1129

Intersecting Pile-Ups of Edge Dislocations (T)—R. G. Altynbaev and Sh. Kh. Khannanov. 14(9), 2439(C) (Mar. 1973); CPM-7303E1263

Dislocation Structure of Large-Angle Metal Grain Boundaries and Metal Recrystallization (T)—I. M. Mikhailovskii. 14(10), 2475–9 (Apr. 1973); CPM-7304E1121

Acoustic Emission Associated with the Annihilation of Dislocations (T)—V. D. Natsik and K. A. Chishko. 14(11), 2678–82 (May 1973); CPM-7305D0906

Kinetics of Motion of Slip Bands in NaCl Crystals (E)—S. I. Zaitsev and É. M. Nadgornyi. 14(11), 2787–90 (May 1973); CPM-7305D1015

Nonconservative Motion of Dislocations near Grain Boundaries Which Are Sources or Sinks of Vacancies (T)—A. L. Roitburd and B. A. Vershok. 14(11), 2818–21 (May 1973); CPM-7305D1046

Mobility of Individual Dislocations in Gallium Arsenide (E)—V. B. Osvenskii and L. P. Kholodnyi. 14(11), 2822–5 (May 1973); CPM-7305D1050

Temperature Dependence of Dislocation Mobility in Gamma Irradiated (10^7 rad Dose) NaCl Crystals (E/T)—G. A. Ermakov and É. M. Nadgornyi. 14(12), 2962–6 (Jun. 1973); CPM-7306D0804

Influence of the Surface Tension on the Heterogeneous Nucleation of Dislocations in Crystals (T)—L. G. Orlov. 14(12), 3091–2(C) (Jun. 1973); CPM-7306D0933

Dislocation-Induced Anisotropic Absorption of Polarized Light in Cadmium Sulfide (E)—N. V. Klassen and Yu. A. Osip'yan. 14(12), 3094–5(C) (Jun. 1973); CPM-7306D0936

5.10.30.75. Stacking Faults and Other Planar Defects

Excitation of Exciton States in ZnS Crystals Containing Stacking Faults (E)—L. G. Suslina and E. B. Shadrin. 14(1), 243–4(C) (Jul. 1972); CPM-7207D1202

Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14 (3), 732–7 (Sep. 1972); CPM-7209D0166

Diffuse Scattering of X Rays by Polycrystalline Aggregates Containing Dislocation Loops of Small Radius (T)—I. A. Malinenko and O. N. Shivrin. 14(10), 2599–600 (Apr. 1973); CPM-7304E1245

5.10.30.90. Other Crystal Defects

Thermal Defects Silicon (E)—L. F. Konorova. 14(6), 1610–1(C) (Dec. 1972); CPM-7212D0946

Defect Distribution near a Paramagnetic Center (T/E)—M. G. Blazha, A. A. Bugai, V. M. Maksimenko and A. B. Roitsin. 14(7), 1779–82 (Jan. 1973); CPM-7301C0739

Focusing Influence of Vacancies on the Propagation of Atomic Collision Chains. Elongation of Chains (T)—É. Ya. Mikhlin and V. V. Nelaev. 14(7), 1866–8(C) (Jan. 1973); CPM-7301C0826

Effect of Ultrasonic Irradiation on the Development of Twinning in Cadmium (E)—I. A. Gindin, O. I. Volchok and I. M. Neklyudov. 14(11), 2762–3 (May 1973); CPM-7305D0990

Surface Electric Field Arising from Three-Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

Structural Imperfections of Diffusion-Doped SiC(6H) Layers (E)—A. S. Tregubova, E. N. Mokhov and I. L. Shul'pina. 14(12), 3061–3 (Jun. 1973); CPM-7306D0903

5.10.40. Crystal Impurities

5.10.40.40. Impurity Concentration, Distribution and Gradients

Decompostion of Impurity Associations in Lithium Fluroide Single Crystals (E)—A. A. Blistanov, A. N. Pavlov and M. P. Shaskol'skaya. 14(4), 1051–2(C) (Oct. 1972); CPM-7210D0866

Electron–Spin Echo from Cr^{3+} in Laser Ruby (T/E)—U. Kh. Kopvillem, B. P. Smolyakov and R. Z. Sharipov. 14(5), 1239–40 (Nov. 1972); CPM-7211A1491

Off–Center Position of Mn^{+} Ions in KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov, N. I. Mel'nikov and N. G. Romanov. 14(7), 1842–3(C) (Jan. 1973); CPM-7301C0802

Acentric Position of Silver Anions in a KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov and N. I. Mel'nikov. 14(7), 1876–8(C) (Jan. 1973); CPM-7301C0836

Diffusion and Solubility of Co in GaAs (E)—G. S. Kulikov and I. N. Nikulitsa. 14(9), 2335–8 (Mar. 1973); CPM-7303E1159

5.10.40.90. Other Topics in Crystal Impurities

Conversion of Molecular CO_3^{2-} Centers in KCl and KBr Single Crystal Presurface Layers (E)—N. G. Politov and B. M. Trakhbrot. 14(2), 483–4(C) (Aug. 1972); CPM-7208E0640

Positronium Atom in Ionic Crystals with NaCl–Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14(3), 608–12 (Sep. 1972); CPM-7209D0042

Spatial Decoration of Defects in CaI Crystals (E)—N. L. Sizova, M. O. Kliya, V. N. Rozhanskii and A. A. Urusovskaya. 14(3), 743–6 (Sep. 1972); CPM-7209D0177

Method for Determining the Thermal Vibration Amplitude of an Impurity Atom Using the Channeling Effect (T)—M. A. Kumakhov. 14(4), 963–5 (Oct. 1972); CPM-7210D0778

Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Formation of Molecular Impurity Centers and Complexes During Electrolysis of Potassium Chloride (E)—Yu. N. Pershits and N. N. Vasil'ev. 14(11), 2898–9(C) (May 1973); CPM-7305D1126

Structural Imperfections of Diffusion–Doped SiC(6H) Layers (E)—A. S. Tregubova, E. N. Mokhov and I. L. Shul'pina. 14(12), 3061–3 (Jun. 1973); CPM-7306D0903

5.10.50. Structure of Metals and Alloys

Theory of Pseudopotentials and Vegard's Rule in Alloys of Alkali Metals (T)—G. L. Krasko and Z. A. Gurskii. 14(2), 269–72 (Aug. 1972); CPM-7208E0426

Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

Effect of the Ratio of the Interaction Energies in the First and Second Coordination Spheres on Atomic Ordering in Face–Centered Cubic Solid Solutions (T/E)—N. S. Golosov, L. Ya. Pudan, G. S. Golosova and L. E. Popov. 14(5), 1280–7 (Nov. 1972); CPM-7211A1532

5.10.60. Structure of Other Inorganic Solids (incl. Minerals)

X–Ray Diffraction Study of Local Order in the MgO—ZnO System (E)—S. A. Chudinova and O. N. Shivrin. 14(5), 1297–301 (Nov. 1972); CPM-7211A1549

Mössbauer Spectroscopic Investigation of the Structure of Layered Compounds of Graphite and Iron (E)—R. A. Stukan, Yu. N. Novikov, V. A. Povitskii and A. N. Salugin. 14(11), 2914–5(C) (May 1973); CPM-7305D1142

5.10.90. Other Topics in Crystallography

Influence of Molecule Symmetry on Random Reorientations in Solids (T)—M. M. Bil'danov, F. I. Bashirov and R. A. Dautov. 14(2), 528–9(C) (Aug. 1972); CPM-7208E0685

5.15. LATTICE DYNAMICS

5.15.10. General Theory of Lattice Dynamics

Inelastic Scattering of Slow Neutrons by Localized Vibrations of Interstitial Atoms (T)—I. P. Dzyub and V. Z. Kochmarskii. 14(1), 1–8 (Jul. 1972); CPM-7207D0960

5.15.20. Phonons and Vibrations in Crystal Lattices

5.15.20.10. General

Bound–State Contribution to the Nonlinear Polarizability (T)—N. A. Efremov and E. P. Kaminskaya. 14(4), 1012–9 (Oct. 1972); CPM-7210D0827

Stability of Anharmonic Crystals with Vacancies (T)—V. L. Aksenov. 14(7), 1718–22 (Jan. 1973); CPM-7301C0678

Noncentral Interaction in Crystals and Molecules According to the Valence–Bond Model (T)—L. M. Terent'eva, Yu. A. Logachev and B. Ya. Moizhes. 14(10), 2543–9 (Apr. 1973); CPM-7304E1189

5.15.20.20. Phonon States, Bands, Normal Modes and Dispersion

Effect of Crystal Lattice Disorder on the Vibrational Spectrum and the Optical States of $CdGeP_2$ (E)—Yu. F. Markov and N. B. Reshetnyak. 14(1), 37–40 (Jul. 1972); CPM-7207D0996

Optical Phonons in a System of $Zn_xCd_{1-x}Te$ Mixed Crystals (E)—L. K. Vodop'yanov, E. A. Vinogradov, A. M. Blinov and V. A. Rukavishnikov. 14(1), 219–20(C) (Jul. 1972); CPM-7207D1178

Optical Properties of V_2O_3 in the Region of the Phase Transition (E/T)—M. S. Kozyreva, V. N. Novikov and B. A. Tallerchik. 14 (3), 639–43 (Sep. 1972); CPM-7209D0073

Possibility of Fermi Resonance between a Local Impurity Vibration and the Vibrations of the Host Lattice of a Crystal (E/T)—M. Ya Valakh, M. P. Lisitsa, N. E. Novoseletskii and A. M. Yaremko. 14 (3), 702–5 (Sep. 1972); CPM-7209D0136

Optical-Phonon Spectrum of the Antiferromagnetic Semiconductor MnTe (E)—L. V. Povstyanyi, V. I. Kut'ko and A. I. Zvyagin. 14 (5), 1346–7(C) (Nov. 1972); CPM-7211A1598

Broadening, Profile, and Shift of Phononless Lines in the Spectra of Impure n-Paraffin Crystals Recorded in the 4.2–77°K Range (E)—E. I. Al'shits, É. D. Godyaev and R. I. Personov. 14(6), 1385–92 (Dec. 1972); CPM-7212D0721

Transverse Polaritons in an $LiNbO_3$ Crystal (E)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(6), 1562–3(C) (Dec. 1972); CPM-7212D0898

Additional Lattice Absorption Bands in SiC Polytypes (E)—G. B. Dubrovskii and E. I. Radovanova. 14(8), 2127–8(C) (Feb. 1973); CPM-7302E1253

Optical Phonons in Amorphous Films of Arsenic Chalcogenides (E)—V. P. Zakharov, V. S. Gerasimenko and L. P. Kucherenko. 14(8), 2138–9(C) (Feb. 1973); CPM-7302E1264

Relaxation of the Vibrational Energy in Methane Crystals (T)—A. A. Ovchinnikov and N. S. Erikhman. 14(10), 2451–7 (Apr. 1973); CPM-7304E1097

Force Constants and Phonon Dispersion in Rare-Gas Crystals (T/E)—K. B. Tolpygo and E. P. Troitskaya. 14(10), 2480–3 (Apr. 1973); CPM-7304E1126

Upper Branch of Ordinary Polaritons in an $LiNbO_3$ Crystal (E/T)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(10), 2611(C) (Apr. 1973); CPM-7304E1257

Phonon–Phonon Scattering and High-Temperature Lattice Thermal Conductivity (T/E)—Yu. A. Logachev and M. S. Yur'ev. 14(11), 2826–31 (May 1973); CPM-7305D1054

Temperature Dependence of Infrared Dispersion of Lattice Reflection in GaSb (E/T)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(11), 2838–40 (May 1973); CPM-7305D1066

Surface Optical Vibrations in a Thin Film (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(11), 2849–52 (May 1973); CPM-7305D1077

Thermal Capacity of the Ferroelectric $NaNH_4SeO_4.2H_2O$ (E/T)—K. S. Aleksandrov, V. G. Khlyustov, I. A. Flerov and N. V. Beznosikova. 14(11), 2853–5 (May 1973); CPM-7305D1081

Multiphonon Absorption in Gallium Antimonide (E)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(12), 3041–3 (Jun. 1973); CPM-7306D0883

Surface Excitons and Phonons at a Metal–Insulator Interface in the Presence of Charge Transfer (T)—V. M. Agranovich. 14(12), 3085–6(C) (Jun. 1973); CPM-7306D0927

5.15.20.50. Phonon–Phonon Interactions

Calculation of Phonon Absorption of Ultrasonic Waves in Alkali Halide Crystals (T/E)—P. V. Kovalenok and L. G. Merkulov. 14 (2), 283–6 (Aug. 1972); CPM-7208E0440

Investigation of High-Frequency Acoustic Harmonics in Alkaline-Earth Metal Fluorides by Means of Braff Light Scattering (E/T)—O. V. Shakin and V. V. Lemanov. 14(5), 1189–92 (Nov. 1972); CPM-7211A1441

Fermi Resonance of a Polariton with a Biphonon in a Crystal of $LiNbO_3$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2432–3(C) (Mar. 1973); CPM-7303E1256

Phase Transitions in Ferroelectrics Containing Hydrogen Bonds (T)—P. I. Konsin and N. N. Kristofel'. 14(10), 2484–8 (Apr. 1973); CPM-7304E1130

Phonon–Phonon Scattering and High-Temperature Lattice Thermal Conductivity (T/E)—Yu. A. Logachev and M. S. Yur'ev. 14(11), 2826–31 (May 1973); CPM-7305D1054

Role of the Phonon Bottleneck in Paraelectric Relaxation (T)—V. I. Konovalov. 14(11), 2909–10(C) (May 1973); CPM-7305D1137

5.15.20.60. Phonon–Electron Interactions

Effect of Spin-Lattice Relaxation and Ultrasound on the Perturbed γ-γ Angular Correlation in Paramagnets (E)—G. A. Denisenko and E. P. Khaimovich. 14(1), 106–10 (Jul. 1972); CPM-7207D1065

Spin–Phonon Interaction in Doped Fluorite-Type Crystals (T)—Z. I. Ivanenko and B. Z. Malkin. 14(1), 122–4 (Jul. 1972); CPM-7207D1081

Distribution Function and Energy Losses of Hot Electrons Interacting with Optical Phonons (T)—B. L. Gel'mont, R. I. Lyagushchenko and I. N. Yassievich. 14(2), 445–52 (Aug. 1972); CPM-7208E0602

Effect of a Strong Electric Field on the Interaction of Electrons with High-Frequency Ultrasound (T)—P. E. Zil'berman and A. G. Mishin. 14(3), 771–2(C) (Sep. 1972); CPM-7209D0205

Kinetic Properties and Electron Scattering Mechanisms of Ti, Zr, and Hf at High Temperatures (T/E)—V. E. Zinov'ev, S. I. Masharov, L. I. Chupina and P. V. Gel'd. 14(4), 902–5 (Oct. 1972); CPM-7210D0717

Exciton–Phonon Displacive Phase Transitions (T)—P. I. Konsin. 14 (4), 978–80 (Oct. 1972); CPM-7210D0793

Negative Photoconductivity in Semiconductors (T)—Yu. G. Bachinin and Yu. V. Gulyaev. 14(4), 1092–3(C) (Oct. 1972); CPM-7210D0907

Bound Electron–Phonon States in a Magnetic Field (T)—B. I. Kaplan and I. B. Levinson. 14(5), 1212–20 (Nov. 1972); CPM-7211A1464

New Type of Acoustic Surface Waves in Conducting Crystals (T)—Yu. V. Gulyaev. 14(5), 1318–9(C) (Nov. 1972); CPM-7211A1570

Broadening, Profile, and Shift of Phononless Lines in the Spectra of Impure n-Paraffin Crystals Recorded in the 4.2–77°K Range (E)—E. I. Al'shits, É. D. Godyaev and R. I. Personov. 14(6), 1385–92 (Dec. 1972); CPM-7212D0721

Absorption of Light by Bound States of an Electron and a Phonon in Magnetic Fields (T)—B. I. Kaplan and I. B. Levinson. 14(6), 1434–40 (Dec. 1972); CPM-7212D0770

Effect of Renormalized Plasma Spectrum on the Superconductivity in Semiconductors (T)—A. A. Golub and M. K. Kolpazhiu. 14(7), 1695–8 (Jan. 1973); CPM-7301C0655

Mössbauer Effect at ^{119}Sn Impurity Atoms in Gallium in Porous Glass (E)—V. N. Bogomolov, N. A. Klushin and P. P. Seregin. 14(7), 1729–31 (Jan. 1973); CPM-7301C0689

Theory of Deformation–Concentration Instability in Semiconductors (T)—V. I. Pipa and V. N. Piskovoi. 14(8), 1979–84 (Feb. 1973); CPM-7302E1105

Impurity Absorption of Light in a Strong Electric Field below the Absorption Edge (T)—S. F. Timashev. 14(9), 2267–9 (Mar. 1973); CPM-7303E1091

Thermal Conductivity of $GaAs_{1-x}P_x$ Solid Solutions (E)—L. V. Gorchak, V. V. Negreskul and A. G. Cheban. 14(9), 2382–4(C) (Mar. 1973); CPM-7303E1206

Thermal Broadening and Shift of Phononless Impurity Optical Lines (T)—I. S. Osad'ko. 14(10), 2522–6 (Apr. 1973); CPM-7304E1168

Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–8 (Apr. 1973); CPM-7304E1196

Threshold Singularity in the Spectrum of Electrons Coupled to Optical Phonons by the Polarization Interaction (T)—A. Yu. Matulis. 14(10), 2564–6 (Apr. 1973); CPM-7304E1210

Piezospectroscopic Investigation of Excited Exciton States in Cubic ZnS Single Crystals (E)—L. G. Suslina and D. L. Fedorov. 14(10), 2575–8 (Apr. 1973); CPM-7304E1221

Effect of Band Structure on the Recombination Mechanism of Condensed Charge Carriers in Germanium, Silicon, and Their Alloys (E/T)—Ya. E. Pokrovskii, K. I. Svistunova and N. V. Alkeev. 14(11), 2805–7 (May 1973); CPM-7305D1033

Effect of Microinhomogeneities on the Electron Absorption of Ultrasound in n-InSb (E/T)—I. L. Drichko and S. I. Kogan. 14 (11), 2856–9 (May 1973); CPM-7305D1084

Influence of Isotopic Scattering on the Thermoelectric Power of Metals (T)—A. M. Ermolaev. 14(11), 2904(C) (May 1973); CPM-7305D1132

Multiphonon Absorption in Gallium Antimonide (E)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(12), 3041–3 (Jun. 1973); CPM-7306D0883

5.15.20.90. Other Topics in Phonons and Vibrations in Crystal Lattices

Interaction of Excitons with Phonons in Benzene Crystals (E)—V. L. Broude and V. K. Dolganov. 14(1), 225–7(C) (Jul. 1972); CPM-7207D1184

Dynamics of Vibrations of Sn^{119} Nuclei in Dilute Tin-Base Alloys (E)—V. V. Chekin, A. I. Velikodnyi, S. N. Glushko and E. D. Semenova. 14(2), 479–80(C) (Aug. 1972); CPM-7208E0636

Acoustic Saturation and Amplification of Na^{23} NMR Lines in $NaNO_3$ Crystals (E/T)—V. M. Sarnatskii and V. A. Shutilov. 14(3), 649–54 (Sep. 1972); CPM-7209D0083

Form of Exciton Absorption Bands of CdS Single Crystals at T=4.2°K (E)—M. I. Strashnikova and A. T. Rudchik. 14(4), 845–8 (Oct. 1972); CPM-7210D0660

Correction to the Paper by V. A. Timofeev "Shift of the Paramagnetic Resonance Line Due to a Spin–Phonon Interaction" [11, 1897 (1970)] (E)—V. A. Timofeev. 14(4), 1089(C) (Oct. 1972); CPM-7210D0904

Mixed Plasmon–Phonon Surface Modes in n–InSb (E/T)—I. I. Reshina, Yu. M. Gerbshtein and D. N. Mirlin. 14(4), 1104–5(C) (Oct. 1972); CPM-7210D0919

Study of Iron Atom Vibrations in Vivianite and Pyrite Crystals Using Mössbauer Spectroscopy (E)—I. P. Suzdalev, I. A. Vinogradov and V. K. Imshennik. 14(5), 1136–42 (Nov. 1972); CPM-7211A1388

Self–Focusing of the Radiation of an Argon Laser in $Bi_{12}GeO_{20}$ by Means of Raman Scattering (E)—B. Kh. Bairamov, B. P. Zakharchenya and Z. M. Khashkhozhev. 14(5), 1181–8 (Nov. 1972); CPM-7211A1433

Spin—Lattice Relaxation in a Solid Dielectric Containing Paramagnetic Defects (T)—G. G. Sergeeva. 14(5), 1294–6 (Nov. 1972); CPM-7211A1546

Damping Effects on the Plasmon–Phonon Spectrum of a Solid (T)—A. A. Kukharskii. 14(6), 1501–6 (Dec. 1972); CPM-7212D0837

Plasmon–Phonon Interaction in Gallium Antimonide (T/E)—N. V. Bozhovskaya and V. K. Subashiev. 14(7), 1627–33 (Jan. 1973); CPM-7301C0587

Focusing Influence of Vacancies on the Propagation of Atomic Collision Chains. Elongation of Chains (T)—É. Ya. Mikhlin and V. V. Nelaev. 14(7), 1866–8(C) (Jan. 1973); CPM-7301C0826

Spin Diffusion and Spin–Lattice Relaxation Kinetics of Hydrogen Atoms in Glassy Matrices at 77°K (T/E)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1956–60 (Feb. 1973); CPM-7302E1082

Interaction of Transverse Elastic Waves with Spin Waves in the Uniaxial Ferromagnet $RbNiF_3$ (E/T)—A. N. Grishmanovskii, V. V. Lemanov, G. A. Smolenskii and P. P. Syrnikov. 14(8), 2050–2 (Feb. 1973); CPM-7302E1176

Lattice Absorption of Sound in InSb at 77°K (E/T)—Yu. V. Ilisavskii and D. Chiplis. 14(8), 2085–8 (Feb. 1973); CPM-7302E1211

Ion–Lattice Relaxation and Nuclear Spin–Lattice Relaxation of Li^+ in KCl (T)—A. A. Karmazin and M. D. Glinchuk. 14(8), 2144–5(C) (Feb. 1973); CPM-7302E1270

Effects of Vibron Reduction of the Coulomb and Exchange Interactions in Impurity Pairs (T)—B. S. Tsukerblat and B. G. Vekhter. 14(9), 2204–8 (Mar. 1973); CPM-7303E1028

EPR Line Shape in the Presence of the Spin–Phonon and Static Portions of Dipole–Dipole Interactions (T)—B. E. Vugmeister, V. L. Gokhman and V. Ya. Zevin. 14(9), 2280–4 (Mar. 1973); CPM-7303E1104

Effect of Tunnel Extraction of Excitations from a Superconductor on the Superconducting Phase Transition (T)—A. G. Aronov and V. L. Gurevich. 14(9), 2309–11 (Mar. 1973); CPM-7303E1133

Quantum Efficiency in Semiconductors with Kane–Type Band Structure (T)—N. S. Baryshev, K. Ya. Shtivel'man and M. P. Shchetinin. 14(9), 2344–7 (Mar. 1973); CPM-7303E1168

Polaritons in a Biaxial Crystal of $Ba_2NaNb_5O_{15}$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2402–3(C) (Mar. 1973); CPM-7303E1226

Interference in Neutron Scattering in Anharmonic Crystals (T)—N. M. Plakida. 14(10), 2462–7 (Apr. 1973); CPM-7304E1108

Phase Transitions in Ferroelectrics Containing Hydrogen Bonds (T)—P. I. Konsin and N. N. Kristofel'. 14(10), 2484–8 (Apr. 1973); CPM-7304E1130

Dependence on Concentration and Frequency of Spin–Lattice Relaxation of Co^{2+} in Monoclinic Tungstates (E)—A. D. Prokhorov and G. A. Tsintsadze. 14(11), 2802–4 (May 1973); CPM-7305D1030

Magnetoelastic Coupling of Fe^{3+} Ions in Yttrium Iron Garnet (E/T)—É. A. Petrakovskaya and É. M. Smokotin. 14(11), 2888–9(C) (May 1973); CPM-7305D1116

Role of the Phonon Bottleneck in Paraelectric Relaxation (T)—V. I. Konovalov. 14(11), 2909–10(C) (May 1973); CPM-7305D1137

Spin–Lattice Relaxation of Nuclei of Paramagnetic Ions (T)—M. P. Vaisfel'd. 14(12), 2996–9 (Jun. 1973); CPM-7306D0838

Theory of Damping of Local Vibrations in Semiconductors (T)—V. F. Los'. 14(12), 3048–50 (Jun. 1973); CPM-7306D0890

5.15.30. Thermal and Statistical Properties of Lattices

5.15.30.20. Thermal Conduction of Lattices

Thermal Conductivity of the Me_3X_4 Chalcogenides of Rare Earth Elements (E/T)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(3), 720–4 (Sep. 1972); CPM-7209D0154

Elastic Wave Damping in Cubic Crystals According to the Akhiezer Mechanism (E)—V. Ya Avdonin, V. V. Lemanov, I. A. Smirnov and V. V. Tikhonov. 14(3), 747–52 (Sep. 1972); CPM-7209D0181

Thermal Conductivity of the La_2Te_3–La_3Te_4 System (E)—I. A. Smirnov, L. S. Parfen'eva and V. M. Sergeeva. 14(4), 899–901 (Oct. 1972); CPM-7210D0714

Phonon–Phonon Scattering and High–Temperature Lattice Thermal Conductivity (T/E)—Yu. A. Logachev and M. S. Yur'ev. 14(11), 2826–31 (May 1973); CPM-7305D1054

5.15.30.70. Cooperative Crystal Statistics and Order–Disorder Phenomena

Effect of Crystal Lattice Disorder on the Vibrational Spectrum and the Optical States of $CdGeP_2$ (E)—Yu. F. Markov and N. B. Reshetnyak. 14(1), 37–40 (Jul. 1972); CPM-7207D0996

Effect of the Ratio of the Interaction Energies in the First and Second Coordination Spheres on Atomic Ordering in Face–Centered Cubic Solid Solutions (T/E)—N. S. Golosov, L. Ya. Pudan, G. S. Golosova and L. E. Popov. 14(5), 1280–7 (Nov. 1972); CPM-7211A1532

High–Pressure Phase Transitions of the First Kind in Rochelle Salt (E)—V. P. Mylov, G. G. Leonidova and B. R. Churagulov. 14(7), 1893–4(C) (Jan. 1973); CPM-7301C0853

Theory of Ordering in Multicomponent Solid Solutions (T)—D. A. Badalyan and A. G. Khachaturyan. 14(9), 2270–3 (Mar. 1973); CPM-7303E1094

Long– and Short–Range Order in Alloys with Cu_3Au Type Crystal Lattices (T)—N. S. Golosov, G. S. Golosova and L. E. Popov. 14 (10), 2493–6 (Apr. 1973); CPM-7304E1139

Specific Heat Anomaly near an Orientational Phase Transition in Ammonium Bromide (E)—É. N. Kostina and G. A. Mil'ner. 14 (11), 2923–5(C) (May 1973); CPM-7305D1151

5.15.30.90. Other Topics in Thermal Properties of Lattices

Method for Determining the Thermal Vibration Amplitude of an Impurity Atom Using the Channeling Effect (T)—M. A. Kumakhov. 14(4), 963–5 (Oct. 1972); CPM-7210D0778

5.15.70. Surface and Interface Vibrations

Microscopic Theory of Surface Vibrations in Ionic Crystal Films (T)—V. V. Bryksin and Yu. A. Firsov. 14(4), 981–92 (Oct. 1972); CPM-7210D0796

Mixed Plasmon–Phonon Surface Modes in n–InSb (E/T)—I. I. Reshina, Yu. M. Gerbshtein and D. N. Mirlin. 14(4), 1104–5(C) (Oct. 1972); CPM-7210D0919

Radiation of Rayleigh Waves by Edge Dislocations Emerging at the Surface of a Crystal (T)—V. D. Natsik and A. N. Burkanov. 14(5), 1111–6 (Nov. 1972); CPM-7211A1363

New Type of Acoustic Surface Waves in Conducting Crystals (T)—Yu. V. Gulyaev. 14(5), 1318–9(C) (Nov. 1972); CPM-7211A1570

Acoustoelectric Effect in a Piezoelectric–Semiconductor Layered Structure (E)—A. M. Kmita and A. V. Medved'. 14(9), 2285–93 (Mar. 1973); CPM-7303E1109

Absorption of Surface Acoustic Waves in Superconductors (T)—G. A. Sorokin. 14(11), 2683–5 (May 1973); CPM-7305D0911

Surface Optical Vibrations in a Thin Film (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(11), 2849–52 (May 1973); CPM-7305D1077

Absorption of Rayleigh Acoustic Waves in Metals in Magnetic Fields (T)—R. G. Mints and G. A. Sorokin. 14(12), 3032–6 (Jun. 1973); CPM-7306D0874

5.15.90. Other Topics in Lattice Dynamics

Localized and Quasilocalized Vibrations in Anharmonic Raman Spin–Lattice Relaxation (T)—V. Ya. Zevin and V. I. Konovalov. 14(3), 738–42 (Sep. 1972); CPM-7209D0172

5.20. ENERGY STATES IN SOLIDS

5.20.20. Energy Band Structure and Fermi Surfaces of Specific Types of Materials

5.20.20.15. Metals and Semimetals

Zero-Sound Waves in Two-Component Fermi Liquids (T)—S. Z. Dunin and E. P. Fetisov. 14(1), 221–2(C) (Jul. 1972); CPM-7207D1180

Fermi Surface of Cadmium under Pressure (E)—A. A. Galkin, E. P. Degtyar', S. E. Zhevago and A. I. Popovich. 14(3), 787–8(C) (Sep. 1972); CPM-7209D0221

Kinetic Properties and Electron Scattering Mechanisms of Ti, Zr, and Hf at High Temperatures (T/E)—V. E. Zinov'ev, S. I. Masharov, L. I. Chupina and P. V. Gel'd. 14(4), 902–5 (Oct. 1972); CPM-7210D0717

Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14 (4), 971–4 (Oct. 1972); CPM-7210D0786

Effect of Singularities in the Density of Electron States on the Thermodynamics of a Normal Metal (T)—V. G. Bar'yakhtar, V. V. Gann and V. I. Makarov. 14(6), 1477–80 (Dec. 1972); CPM-7212D0813

Instability of Two-Band Model of Metals with Respect to Annihilation Scattering (T)—Do Chan Kat and Yu. V. Kopaev. 14 (9), 2252–8 (Mar. 1973); CPM-7303E1076

5.20.20.30. Semiconductors

Photoemission Studies of Oxyhalide Crystals of Bismuth (E)—V. M. Bentsa, M. V. Shtilikha, D. V. Chepur, Yu. Yu. Kampi and V. V. Matyashevskii. 14(3), 671–3 (Sep. 1972); CPM-7209D0105

Conductivity, Thermoelectric Properties, and Band Structure of Crystalline BiSeI (E/T)—D. M. Bercha and M. P. Zayachkovskii. 14(3), 766–7(C) (Sep. 1972); CPM-7209D0200

Some Features of the Valence Band of Bi_2Te_3 (E)—V. V. Sologub, A. D. Goletskaya and R. V. Parfen'ev. 14(3), 783–4(C) (Sep. 1972); CPM-7209D0217

Spin Waves in Two-Component Fermi Liquids (T)—S. Z. Dunin and E. P. Fetisov. 14(4), 881–4 (Oct. 1972); CPM-7210D0696

Intrinsic Absorption and Thermal Properties of Stibiotantalite (E/T)—V. K. Novik, N. F. Karyakina and V. A. Timoshenkov. 14(5), 1288–90 (Nov. 1972); CPM-7211A1540

Effect of Band Structure on the Recombination Mechanism of Condensed Charge Carriers in Germanium, Silicon, and Their Alloys (E/T)—Ya. E. Pokrovskii, K. I. Svistunova and N. V. Alkeev. 14(11), 2805–7 (May 1973); CPM-7305D1033

Two-Photon Absorption and Optical Orientation of Free Carriers in Cubic Crystals (T)—E. L. Ivchenko. 14(12), 2942–6 (Jun. 1973); CPM-7306D0784

Long-Wavelength Fundamental Absorption Edge of $CdSiP_2$ Crystals (E)—I. S. Gorban', V. V. Lugovskii and V. P. Radzivil. 14(12), 3089–90(C) (Jun. 1973); CPM-7306D0931

5.20.20.40. Insulators

Landau Levels in the Valence Band of Tellurium (T)—M. S. Bresler, A. S. Skal and É. B. Sonin. 14(1), 165–71 (Jul. 1972); CPM-7207D1124

Some Features of Hexagonal Boron Nitride (E)—M. B. Khusidman. 14(11), 2791–3 (May 1973); CPM-7305D1019

Tunnel Ionization of Excited In^+ Centers in KCl:In (E)—V. I. Leiman. 14(12), 3057–60 (Jun. 1973); CPM-7306D0899

5.20.20.90. Other Materials

Influence of Screening of the Width of the "Acoustic" Forbidden Band (T)—B. D. Laikhtman and Yu. V. Pogorel'skii. 14(9), 2393–5 (C) (Mar. 1973); CPM-7303E1217

Behavior of Alkali Atoms Introduced into the Xenon Lattice (T)—M. A. Belogolovskii and K. B. Tolpygo. 14(10), 2571–4 (Apr. 1973); CPM-7304E1217

5.20.25. Localized Electron States and Other Electronic Theories or Models

Spin–Phonon Interaction in Doped Fluorite-Type Crystals (T)—Z. I. Ivanenko and B. Z. Malkin. 14(1), 122–4 (Jul. 1972); CPM-7207D1041

Domain Structure and Local States in SbSI Type Semiconductor—Ferroelectrics (T)—D. M. Bercha, A. A. Kikineshi, D. G. Semak and D. V. Chepur. 14(5), 1359–60(C) (Nov. 1972); CPM-7211A1611

Local Electron States in Domain Walls of Ferroelectrics (T)—Yu. I. Balkarei. 14(6), 1583–4(C) (Dec. 1972); CPM-7212D0919

Fine Structure of the Bielectron or Bihole Energy Levels in BiI_3 Crystals (E)—E. F. Gross, N. V. Starostin, M. P. Shepilov and R. I. Shekhmamet'ev. 14(7), 1681–5 (Jan. 1973); CPM-7301C0641

Thermodynamics of the Hubbard Model in the Strong-Interaction Region (T)—L. N. Bulaevskii and D. I. Khomskii. 14(12), 3015–8 (Jun. 1973); CPM-7306D0857

5.20.30. Impurity and Defect Levels and Positron States

5.20.30.30. Semiconductors

Thermal Ionization of Deep Centers in the Space-Charge Region of Semiconductors (T)—S. F. Timashev. 14(1), 136–8 (Jul. 1972); CPM-7207D1095

Band Structure of Amorphous Zinc Oxide Doped with Carbon (E)—V. F. Korzo and Yu. V. Kopaev. 14(2), 355–9 (Aug. 1972); CPM-7208E0512

Indirect Phononless Optical Transitions in Mixed Germanium–Silicon Crystals (E/T)—V. I. Safarov and A. N. Titkov. 14(2), 380–3 (Aug. 1972); CPM-7208E0537

Impurity Absorption Spectra of Silicon Carbide in the Near Infrared Region (E)—I. S. Gorban', Yu. A. Marazuev and A. S. Skirda. 14 (3), 664–7 (Sep. 1972); CPM-7209D0098

Hybridization of the Atomic Orbitals at Structural Defects in Si (T)—A. N. Zhevno, V. F. Stel'makh and V. D. Tkachev. 14(4), 1007–11 (Oct. 1972); CPM-7210D0822

Kinetics of Energy Transfer in a Crystal (T)—V. P. Sakun. 14(8), 1906–14 (Feb. 1973); CPM-7302E1032

Photoionization Spectra of Impurity Centers in α SiC(6H) at High Temperatures (E)—I. S. Gorban', V. P. Zavada and A. S. Skirda. 14(10), 2652–3(C) (Apr. 1973); CPM-7304E1298

5.20.30.40. Ionic Crystals

Structure of the Absorption Bands of Quasimetallic Centers in Alkali Halide Crystals (E)—V. V. Golubtsov and B. N. Khlopkov. 14(1), 232–3(C) (Jul. 1972); CPM-7207D1191

Positron Centers in Defective Ionic Crystals (T)—A. Z. Varisov and E. P. Prokop'ev. 14(2), 493–5(C) (Aug. 1972); CPM-7208E0650

Ionization of In^+ and Tl^+ Centers in KCl and KBr Crystals by Interstitial Halogen Atoms (E)—I. K. Vitol, V. Ya. Grabovskis, S. G. Zazubovich and Ch. B. Lushchik. 14(4), 894–8 (Oct. 1972); CPM-7210D0709

Structure of Potential Wells Responsible for a Nonequidistant Spectrum of Li^+ in KCl (T)—M. D. Glinchuk and A. A. Karmazin. 14(9), 2398–9(C) (Mar. 1973); CPM-7303E1222

Surface Electronic States in a KCl Crystal (T)—S. G. Zavt and T. Ya. Saks. 14(10), 2502–4 (Apr. 1973); CPM-7304E1148

Properties of F'_A Centers in Defect Crystals with Ionic Type Bonding (T)—E. P. Prokop'ev. 14(10), 2520–1 (Apr. 1973); CPM-7304E1166

Influence of an Electric Field on the Parameters of Impurity Centers in Al_2O_3 (E)—V. V. Mikho, A. P. Fedchuk and L. M. Stambol'skaya. 14(10), 2665–6(C) (Apr. 1973); CPM-7304E1311

5.20.30.90. Other Topics in Impurity and Defect Levels

Quantum States in Structures with Two Types of Point Defects (T)—A. S. Dolgov. 14(4), 842–4 (Oct. 1972); CPM-7210D0657

Effect of Resonance Interaction on Line Profile (T)—L. D. Zusman. 14(5), 1207–11 (Nov. 1972); CPM-7211A1459

Impurity Levels in Exciton Insulators (T)—Yu. M. Kuz'min. 14(7), 1634–7 (Jan. 1973); CPM-7301C0594

Behavior of Alkali Atoms Introduced into the Xenon Lattice (T)—M. A. Belogolovskii and K. B. Tolpygo. 14(10), 2571–4 (Apr. 1973); CPM-7304E1217

Comments on the Theory of Impurity Levels (T)—V. G. Baryshevskii. 14(10), 2610(C) (Apr. 1973); CPM-7304E1256

Adsorbed State of Positronium Atoms (E)—A. O. Tatur and A. D. Mokrushin. 14(10), 2617–8(C) (Apr. 1973); CPM-7304E1263

Group-Theoretic Classification of the States of Pairs of Impurity Ions Having an Unfilled and a Filled d Shell (T)—Yu. A. Kudenko and A. P. Slivinskii. 14(11), 2670–1 (May 1973); CPM-7305D0898

Degeneracy of Spin States in Complexes of Paramagnetic Ions (T)—B. A. Men', A. N. Men' and V. I. Cherepanov. 14(12), 2931–5 (Jun. 1973); CPM-7306D0773

5.20.40. Level Splitting and Interactions in Crystals

5.20.40.15. Crystal and Ligand Fields

Theory of the Crystal Field in Dielectrics (T)—M. V. Eremin and A. A. Kornienko. 14(3), 644–8 (Sep. 1972); CPM-7209D0078

Orientational Quadrupolar Relaxation in NMR Crystals (T)—Yu. L. Popov, N. K. Gaisin, F. I. Bashirov, K. S. Saikin and R. A. Dautov. 14(5), 1199–202 (Nov. 1972); CPM-7211A1451

Spin—Lattice Relaxation in a Solid Dielectric Containing Paramagnetic Defects (T)—G. G. Sergeeva. 14(5), 1294–6 (Nov. 1972); CPM-7211A1546

Theory of Quadrupolar Spin Echo in Polycrystalline Samples Excited by Coherent Resonance Pulses (T)—M. A. Korchemkin. 14(8), 2019–21 (Feb. 1973); CPM-7302E1145

Crystal Electric Fields in Cadmium–Cobalt and Cadmium–Nickel Ferrites–Spinels (E/T)—O. A. Bayukov, V. P. Ikonnikov, G. N. Il'inova and G. P. Popov. 14(8), 2040–3 (Feb. 1973); CPM-7302E1166

Study of the Processes of Deactivation of the Metastable State of Excited Nd^{3+} Ions in LaF_3 Crystals (E)—Yu. K. Voron'ko, V. V. Osiko, N. V. Savost'yanova, V. S. Fedorov and I. A. Shcherbakov. 14(9), 2294–9 (Mar. 1973); CPM-7303E1118

Parameters of the Crystal Field in Rare-Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2363–4(C) (Mar. 1973); CPM-7303E1187

Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–8 (Apr. 1973); CPM-7304E1196

Effect of the Indirect Exchange Interaction on the Crystal Field Parameters of Rhombic Er^{3+} Centers in Fluorite Crystals (T/E)—I. B. Aizenberg, M. D. Davydova and A. L. Stolov. 14(11), 2710–2 (May 1973); CPM-7305D0938

5.20.40.20. Spin–Orbit Coupling, Zeeman, Stark and Strain Splitting

Exchange Interaction and Zeeman Effect for an Exciton Bound to an Ionized Center in CdSe (T/E)—G. L. Bir, B. S. Razbirin and I. N. Ural'tsev. 14(2), 360–7 (Aug. 1972); CPM-7208E0517

Influence of a Homogeneous Static Electric Field on the Γ^+_5 Exciton Quadrupole Transition in Cu_2O (T/E)—M. I. Shmiglyuk. 14(3), 696–701 (Sep. 1972); CPM-7209D0130

Spin—Lattice Relaxation in a Solid Dielectric Containing Paramagnetic Defects (T)—G. G. Sergeeva. 14(5), 1294–6 (Nov. 1972); CPM-7211A1546

Relaxation of Mössbauer Spectra of $DyVO_4$ (E)—V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Stark Effect and Charge–Transfer States in Organic Semiconductors (E)—L. M. Blinov and N. A. Kirichenko. 14(8), 2163–4(C) (Feb. 1973); CPM-7302E1289

Reduction Factors of Jahn–Teller Systems (T)—V. Z. Polinger, Yu. B. Rozenfel'd, B. S. Tsukerblat and B. G. Vekhter. 14(8), 2165–7(C) (Feb. 1973); CPM-7302E1291

Magnetic Interactions in Rare-Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2198–203 (Mar. 1973); CPM-7303E1022

Effects of Vibron Reduction of the Coulomb and Exchange Interactions in Impurity Pairs (T)—B. S. Tsukerblat and B. G. Vekhter. 14(9), 2204–8 (Mar. 1973); CPM-7303E1028

Summation of Electron Excitations in Fluorite-Type Crystals Activated by Er^{3+} Ions (T)—V. B. Kirii and V. L. Shekhtman. 14(10), 2559–63 (Apr. 1973); CPM-7304E1205

Group-Theoretic Classification of the States of Pairs of Impurity Ions Having an Unfilled and a Filled d Shell (T)—Yu. A. Kudenko and A. P. Slivinskii. 14(11), 2670–1 (May 1973); CPM-7305D0898

5.20.40.30. Exchange Interactions

Theory of Exchange Interaction (T)—M. V. Eremin, A. A. Kornienko and A. M. Leushin. 14(2), 314–6 (Aug. 1972); CPM-7208E0471

Direct Exchange Interaction Between Ions with Partly Filled 3d Shells (T)—R. L. Garifullina, M. V. Eremin and A. M. Leushin. 14(2), 317–24 (Aug. 1972); CPM-7208E0474

Exchange Interaction and Zeeman Effect for an Exciton Bound to an Ionized Center in CdSe (T/E)—G. L. Bir, B. S. Razbirin and I. N. Ural'tsev. 14(2), 360–7 (Aug. 1972); CPM-7208E0517

Non–Heisenberg Exchange Interaction and Effects Due to this Interaction (T)—V. M. Matveev and E. L. Nagaev. 14(2), 408–15 (Aug. 1972); CPM-7208E0565

Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14 (3), 732–7 (Sep. 1972); CPM-7209D0166

Coulomb Excitons in Semiconductors and Screening of Exchange Interaction (T)—V. A. Kiselev and A. G. Zhilich. 14(5), 1233–5 (Nov. 1972); CPM-7211A1485

Indirect Exchange Interaction of Optically Active Impurities Caused by Plasma Oscillations (T)—B. M. Khabibullin. 14(6), 1448–52 (Dec. 1972); CPM-7212D0784

Indirect Exchange Interaction Involving Photoelectrons (T)—A. A. Berdyshev and B. M. Letfulov. 14(7), 1824–5(C) (Jan. 1973); CPM-7301C0784

Exchange Narrowing of Paramagnetic Resonance Line in Chromium Chalcogenide Spinels (E)—A. A. Samokhvalov, V. S. Babushkin, M. I. Simonova and T. I. Arbuzova. 14(7), 1883–4(C) (Jan. 1973); CPM-7301C0843

Theory of the ESR Spectra of a Pair of Paramagnetic Ions Allowing for Antisymmetrical Exchange Interaction (T)—V. I. Cherepanov, S. E. Krestnikov and A. I. Krotkii. 14(8), 1990–2 (Feb. 1973); CPM-7302E1116

Magnetic Interactions in Rare-Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2198–203 (Mar. 1973); CPM-7303E1022

Effects of Vibron Reduction of the Coulomb and Exchange Interactions in Impurity Pairs (T)—B. S. Tsukerblat and B. G. Vekhter. 14(9), 2204–8 (Mar. 1973); CPM-7303E1028

NMR Investigation of Electron Ordering in Magnetite (E)—N. M. Kovtun, E. E. Solov'ev and A. A. Shemyakov. 14(9), 2430–1(C) (Mar. 1973); CPM-7303E1254

Piezospectroscopic Investigation of Excited Exciton States in Cubic ZnS Single Crystals (E)—L. G. Suslina and D. L. Fedorov. 14(10), 2575–8 (Apr. 1973); CPM-7304E1221

Effect of the Indirect Exchange Interaction on the Crystal Field Parameters of Rhombic Er^{3+} Centers in Fluorite Crystals (T/E)—I. B. Aizenberg, M. D. Davydova and A. L. Stolov. 14(11), 2710–2 (May 1973); CPM-7305D0938

Features of the Phase Transition in Magnetic Semiconductors Having a Narrow Forbidden Band (T)—Yu. I. Balkarei and V. G. Baru. 14 (11), 2773–5 (May 1973); CPM-7305D1001

Piezooptic Investigations of the Exciton Spectrum of CdS (E)—M. S. Brodin, I. V. Blonskii, N. A. Davydova and M. I. Strashnikova. 14 (11), 2841–4 (May 1973); CPM-7305D1069

Exchange Interactions in Symmetrical Triads of Paramagnetic Ions (T)—V. A. Gaponenko, M. V. Eremin and Yu. V. Yablokov. 14 (11), 2884–5(C) (May 1973); CPM-7305D1112

Degeneracy of Spin States in Complexes of Paramagnetic Ions (T)—B. A. Men', A. N. Men' and V. I. Cherepanov. 14(12), 2931–5 (Jun. 1973); CPM-7306D0773

Exchange–Coupled Pairs of Mn^{2+} Ions in NaCl (E)—R. L. Garifullina, M. M. Zaripov, V. G. Stepanov and Yu. N. Tolparov. 14(12), 2959–61 (Jun. 1973); CPM-7306D0801

5.20.40.40. Nuclear States and Interactions

EPR of Mn^{2+} Ions in Lithium Metavanadate (E/T)—G. L. Bir, L. V. Dmitrieva and S. A. Kizhaev. 14(1), 18–21 (Jul. 1972); CPM-7207D0977

Effective Magnetic Fields at Sn^{119} Nuclei in Some Magnetically Ordered Perovskites (E)—V. A. Bokov, G. V. Popov, N. N. Parfenova and G. G. Yushina. 14(1), 83–6 (Jul. 1972); CPM-7207D1042

Magnetic Properties of Tl^{2+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682

Hyperfine Fields at Al, P, Sc, and Ta Nuclei in an Fe Matrix (E)—V. D. Kul'kov. 14(2), 537–8(C) (Aug. 1972); CPM-7208E0714

Spin–Lattice Relaxation of Nuclei of Rare Earth Ions with a Singlet Electronic Ground State (T)—M. P. Vaisfel'd. 14(3), 628–31 (Sep. 1972); CPM-7209D0062

Character of Electron–Nuclear Interactions in Metal–Hydrogen Systems Based on Transition Metals of Group IVb (E/T)—E. F. Khodosov and N. A. Shepilov. 14(3), 807–8(C) (Sep. 1972); CPM-7209D0241

Exchange Broadening of the Hyperfine Components of the ESR Spectrum of Nitrogen in Diamond (E/T)—L. A. Shul'man and G. A. Podzyarei. 14(6), 1521–6 (Dec. 1972); CPM-7212D0857

Photon Echo in Ruby (E)—U. Kh. Kopvillem, V. R. Nagibarov, V. A. Pirozhkov, V. V. Samartsev and R. G. Usmanov. 14(6), 1544–5(C) (Dec. 1972); CPM-7212D0880

Mössbauer Determination of Orientation of Spins in the Tetrahedral Sublattice of $Bi_2Fe_4O_9$ (E/T)—V. A. Bokov, A. S. Kamzin and G. Ya. Karapet'yan. 14(8), 2168–70(C) (Feb. 1973); CPM-7302E1294

Magnetic Resonance at Nuclei of Rare–Earth Ions Having a Nonmagnetic Doublet Ground State (T)—M. P. Vaisfel'd and M. A. Teplov. 14(9), 2243–5 (Mar. 1973); CPM-7303E1067

Effect of a Glass–Crystal Phase Transition on the Spin–Lattice Relaxation Time (E)—I. G. Gusakovskaya, T. I. Larkina and V. I. Gol'danskii. 14(9), 2274–6 (Mar. 1973); CPM-7303E1098

Determination of the Parameters of Dipole–Dipole and Quadrupole Interactions (T)—V. A. Bakaev. 14(9), 2434–5(C) (Mar. 1973); CPM-7303E1258

Mössbauer Effect in Impurity Atoms of Fe^{57} in Quartz Single Crystals (E)—M. F. Vereshchak, A. K. Zhetbaev, D. K. Kaipov and K. K. Satpaev. 14(10), 2638–9(C) (Apr. 1973); CPM-7304E1284

Study of the Magnetic Properties of χ and θ Iron Carbide Using Mössbauer Spectroscopy (E)—Yu. V. Maksimov, I. P. Suzdalev and R. A. Arentś. 14(11), 2832–4 (May 1973); CPM-7305D1060

5.20.40.90. Other Topics in Level Splitting

Ion–Lattice Interaction of Noncentral Ions in Cubic Crystals (T)—A. A. Karmazin, M. F. Deigen and M. D. Glinchuk. 14(1), 152–6 (Jul. 1972); CPM-7207D1111

Positronium Atom in Ionic Crystals with NaCl–Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14(3), 608–12 (Sep. 1972); CPM-7209D0042

Hybridization of the Atomic Orbitals at Structural Defects in Si (T)—A. N. Zhevno, V. F. Stel'makh and V. D. Tkachev. 14(4), 1007–11 (Oct. 1972); CPM-7210D0822

5.20.50. Quasiparticles and Complex Centers

5.20.50.10. Excitons

Exciton Mechanism for Superconductivity (T)—L. N. Bulsevskii, Yu. V. Kopaev and Yu. A. Kukharenko. 14(1), 92–4 (Jul. 1972); CPM-7207D1051

Electron–Microscope Detection and Optical Investigation of Exciton Decay Products in KBr Crystals (E/T)—Kh. R.–V. Iygi, Ch. B. Lushchik, A. F. Malyaheva and E. S. Tiisler. 14(1), 95–100 (Jul. 1972); CPM-7207D1054

Linear Electrooptical Effect in Gallium Selenide (E)—V. I. Sokolov and V. K. Subashiev. 14(1), 178–83 (Jul. 1972); CPM-7207D1137

Forbidden Indirect Transitions in Germanium Subjected to a Magnetic Field (E)—V. I. Zemskii. 14(1), 217–8(C) (Jul. 1972); CPM-7207D1176

Interaction of Excitons with Phonons in Benzene Crystals (E)—V. L. Broude and V. K. Dolganov. 14(1), 225–7(C) (Jul. 1972); CPM-7207D1184

Excitation of Exciton States in ZnS Crystals Containing Stacking Faults (E)—L. G. Suslina and E. B. Shadrin. 14(1), 243–4(C) (Jul. 1972); CPM-7207D1202

Exchange Interaction and Zeeman Effect for an Exciton Bound to an Ionized Center in CdSe (T/E)—G. L. Bir, B. S. Razbirin and I. N. Ural'tsev. 14(2), 360–7 (Aug. 1972); CPM-7208E0517

Bound Exciton Luminescence in Germanium Crystals (E)—E. F. Gross, B. V. Novikov and N. S. Sokolov. 14(2), 368–71 (Aug. 1972); CPM-7208E0525

Anomalous Intensity of Exciton–Impurity Absorption in CdS Crystals (E)—V. B. Timofeev and T. N. Yalovets. 14(2), 399–403 (Aug. 1972); CPM-7208E0556

High–Symmetry Exciton in Alkali Halide Crystals (T)—T. A. Kudykina and K. B. Tolpygo. 14(2), 535–6(C) (Aug. 1972); CPM-7208E0692

Recombination Radiation Involving Participation of Isoelectronic Centers in Antimony–Doped Gallium Phosphide (E)—D. S. Nedzvetskii, S. I. Radautsan and Yu. I. Maksimov. 14(2), 551–3 (C) (Aug. 1972); CPM-7208E0708

Recombination Radiation from High–Density Exciton Systems in Silicon (E)—B. M. Ashkinadze and T. Risbaev. 14(3), 596–601 (Sep. 1972); CPM-7209D0030

Influence of a Homogeneous Static Electric Field on the Γ^+_5 Exciton Quadrupole Transition in Cu_2O (T/E)—M. I. Shmiglyuk. 14(3), 696–701 (Sep. 1972); CPM-7209D0130

Surface Excitons in an Insulator Bounded by a Metal (T)—V. M. Agranovich, A. G. Mal'shukov and M. A. Mekhtiev. 14(3), 725–31 (Sep. 1972); CPM-7209D0159

Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14 (3), 732–7 (Sep. 1972); CPM-7209D0166

Exciton States in a Fluorobenzene Crystal (E)—G. V. Klimusheva and G. M. Soroka. 14(3), 794–5(C) (Sep. 1972); CPM-7209D0228

Form of Exciton Absorption Bands of CdS Single Crystals at T=4.2°K (E)—M. I. Strashnikova and A. T. Rudchik. 14(4), 845–8 (Oct. 1972); CPM-7210D0660

Ionization of In^+ and Tl^+ Centers in KCl and KBr Crystals by Interstitial Halogen Atoms (E)—I. K. Vitol, V. Ya. Grabovskis, S. G. Zazubovich and Ch. B. Lushchik. 14(4), 894–8 (Oct. 1972); CPM-7210D0709

Exciton Electroabsorption in 6H SiC (E)—G. B. Dubrovskii and V. I. Sankin. 14(4), 1024–6 (Oct. 1972); CPM-7210D0839

Photoconductivity of Yttrium Ferrite Garnet (E)—V. V. Eremenko, A. P. Kirichenko, V. N. Rubtsov and V. S. Smirnov. 14(4), 1057–8 (Oct. 1972); CPM-7210D0872

Mott Exciton Spectrum in an Electric Field (T)—B. S. Monozon. 14 (5), 1153–9 (Nov. 1972); CPM-7211A1405

Spectroscopic Observation of the Lifetime of Free Excitons (T/E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14 (5), 1193–8 (Nov. 1972); CPM-7211A1445

Coulomb Excitons in Semiconductors and Screening of Exchange Interaction (T)—V. A. Kiselev and A. G. Zhilich. 14(5), 1233–5 (Nov. 1972); CPM-7211A1485

Temperature Dependence of the Photoconductivity Spectrum of Anthracene (E/T)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(5), 1241–4 (Nov. 1972); CPM-7211A1493

Photoconductivity of Al_2O_3 in the Region near the Intrinsic Absorption Edge (E)—É. R. Il'mas and A. I. Kuznetsov. 14(5), 1255–8 (Nov. 1972); CPM-7211A1507

Kinetics of Bound–Exciton Formation in CdS Crystals (E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14 (5), 1331–2(C) (Nov. 1972); CPM-7211A1583

Absorption of Light by Bound Excitons in Semiconductors (T)—V. A. Andreev and V. I. Sugakov. 14(5), 1338–9(C) (Nov. 1972); CPM-7211A1590

Effect of a Magnetic Field on the Intensity of Exchange–Dipole Transitions (T/E)—V. V. Druzhinin and V. V. Teimurazyan. 14(6), 1381–4 (Dec. 1972); CPM-7212D0717

Exciton Energy Spectra in Crystals of the Diamond and Sphalerite Types (T)—S. M. Zubkova and K. B. Tolpygo. 14(6), 1514–7 (Dec. 1972); CPM-7212D0850

Impurity Levels in Exciton Insulators (T)—Yu. M. Kuz'min. 14(7), 1634–7 (Jan. 1973); CPM-7301C0594

Exciton Spectrum of Photoconductivity in Zinc Sulfide Crystals (E)—A. V. Il'inskii, B. V. Novikov, L. G. Suslina and E. B. Shadrin. 14 (7), 1673–7 (Jan. 1973); CPM-7301C0633

Zero–Phonon Radiative Annihilation of Indirect Excitons in Germanium Crystals with Isoelectronic Substitutional Impurities (T)—E. F. Gross, N. S. Sokolov and A. N. Titkov. 14(7), 1732–4 (Jan. 1973); CPM-7301C0692

Stark Effect and Charge–Transfer States in Organic Semiconductors (E)—L. M. Blinov and N. A. Kirichenko. 14(8), 2163–4(C) (Feb. 1973); CPM-7302E1289

D_{2h} Exciton in an Alkali Halide Crystal (E)—T. A. Kudykina and K. B. Tolpygo. 14(9), 2187–91 (Mar. 1973); CPM-7303E1011

Instability of Two-Band Model of Metals with Respect to Annihilation Scattering (T)—Do Chan Kat and Yu. V. Kopaev. 14 (9), 2252–8 (Mar. 1973); CPM-7303E1076

Optical Orientation of Excitons and the Hanley Effect in Gallium Selenide (E)—Yu. P. Veshchunov, B. P. Zakharchenya and E. M. Leonov. 14(9), 2312–4 (Mar. 1973); CPM-7303E1136

Piezospectroscopic Investigation of Excited Exciton States in Cubic ZnS Single Crystals (E)—L. G. Suslina and D. L. Fedorov. 14(10), 2575–8 (Apr. 1973); CPM-7304E1221

Energy Losses of Fast Electrons Due to the Creation of Excitons in Magnetic Fields (T)—A. E. Glauberman and A. V. Pundyk. 14 (10), 2603–4 (Apr. 1973); CPM-7304E1249

Some Features of Exciton Effects in Layer Crystals (T/E)—M. P. Lisitsa, A. M. Yaremko, G. G. Tarasov, M. Ya. Valakh and L. I. Berezhinskii. 14(11), 2744–7 (May 1973); CPM-7305D0972

Piezooptic Investigations of the Exciton Spectrum of CdS (E)—M. S. Brodin, I. V. Bionskii, N. A. Davydova and M. I. Strashnikova. 14 (11), 2841–4 (May 1973); CPM-7305D1069

Energy of Formation of Biexcitons in Silicon (E)—V. M. Asnin, Yu. N. Lomasov and A. A. Rogachev. 14(11), 2921–2(C) (May 1973); CPM-7305D1149

Luminescence Kinetics of Free and Bound Excitons in CdS Crystals (E)—V. L. Broude, I. I. Tartakovskii and V. B. Timofeev. 14(12), 2971–6 (Jun. 1973); CPM-7306D0813

Effects of Spatial Dispersion in the Reflection Spectra of Crystals Obtained for Oblique Incidence of Light (T/E)—S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(12), 3051–6 (Jun. 1973); CPM-7306D0893

Surface Excitons and Phonons at a Metal–Insulator Interface in the Presence of Charge Transfer (T)—V. M. Agranovich. 14(12), 3085–6(C) (Jun. 1973); CPM-7306D0927

5.20.50.20. Polarons

High-Temperature Hall Mobility in Cubic Polaron Semiconductors (T)—V. V. Bryksin and Yu. A. Firsov. 14(2), 384–6 (Aug. 1972); CPM-7208E0541

Temperature Dependence of Carrier Mobility in Barium Titanate (E/T)—É. V. Bursian, Ya. G. Girshberg and É. N. Starov. 14(4), 872–5 (Oct. 1972); CPM-7210D0687

Conductivity of Semiconductors in Strong Electric Fields (T)—V. V. Bryksin. 14(10), 2505–9 (Apr. 1973); CPM-7304E1151

Theory of the Anomalous Nernst–Ettingshausen Effect in Ferromagnetic Semiconductors (T)—G. L. Lazarev. 14(10), 2591–4 (Apr. 1973); CPM-7304E1237

Mobility of Small Polarons in Strong Electric Fields (T)—V. V. Bryksin and Yu. A. Firsov. 14(12), 3019–27 (Jun. 1973); CPM-7306D0861

5.20.50.30. Complex Centers

Conversion of Molecular CO_3^{2-} Centers in KCl and KBr Single Crystal Presurface Layers (E)—N. G. Politov and B. M. Trakhbrot. 14(2), 483–4(C) (Aug. 1972); CPM-7208E0640

Theory of the Crystal Field in Dielectrics (T)—M. V. Eremin and A. A. Kornienko. 14(3), 644–8 (Sep. 1972); CPM-7209D0078

Structure and Conversion of Hole Centers in KCl(NaCl) Crystals (E) —P. K. Gorbenko and A. A. Kovtun. 14(4), 1046–7(C) (Oct. 1972); CPM-7210D0861

Electron Structure of Ion–Hole Complexes Attached to Ni Ions in ZnS Crystals (E)—S. A. Kazanskii and A. I. Ryskin. 14(6), 1571–2 (C) (Dec. 1972); CPM-7212D0907

Properties of F'_4 Centers in Defect Crystals with Ionic Type Bonding (T)—E. P. Prokop'ev. 14(10), 2520–1 (Apr. 1973); CPM-7304E1166

Theory of Quasistationary Reactions between Point Defects in Crystals (T)—V. L. Vinetskii and I. I. Yaskovets. 14(10), 2605–9 (Apr. 1973); CPM-7304E1251

Formation of Molecular Impurity Centers and Complexes During Electrolysis of Potassium Chloride (E)—Ya. N. Pershits and N. N. Vasil'ev. 14(11), 2898–9(C) (May 1973); CPM-7305D1126

5.20.50.90. Other Quasiparticles

Form of Exciton Absorption Bands of CdS Single Crystals at T=4.2°K (E)—M. I. Strashnikova and A. T. Rudchik. 14(4), 845–8 (Oct. 1972); CPM-7210D0660

Bound-State Contribution to the Nonlinear Polarizability (T)—N. A. Efremov and E. P. Kaminskaya. 14(4), 1012–9 (Oct. 1972); CPM-7210D0827

Transverse Polaritons in an $LiNbO_3$ Crystal (E)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(6), 1562–3(C) (Dec. 1972); CPM-7212D0898

Polaritons in a Biaxial Crystal of $Ba_2NaNb_5O_{15}$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2402–3(C) (Mar. 1973); CPM-7303E1226

Fermi Resonance of a Polariton with a Biphonon in a Crystal of $LiNbO_3$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2432–3(C) (Mar. 1973); CPM-7303E1256

Upper Branch of Ordinary Polaritons in an $LiNbO_3$ Crystal (E/T)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(10), 2611(C) (Apr. 1973); CPM-7304E1257

Determination of the Effective Charge of Ions from the Spectra of the Raman Scattering of Light by Polaritons (T/E)—Yu. G. Sindeev. 14(12), 3110–1(C) (Jun. 1973); CPM-7306D0952

5.20.65. Solid-State Plasmas, Hot Carriers and Helicons

Excitation of Longitudinal Electromagnetic Waves by an Electron Beam in the Plasma of a Solid (T)—R. R. Kikvidze, V. G. Koteteshvili and A. A. Rukhadze. 14(1), 146–8 (Jul. 1972); CPM-7207D1105

Helicon Instability in Solid-State Plasma (T)—V. M. Yakovenko. 14 (1), 249–50(C) (Jul. 1972); CPM-7207D1208

Scattering of Electrons and Neutrons by Coupled Helicon–Magnon Waves (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(2), 387–90 (Aug. 1972); CPM-7208E0544

Distribution Function and Energy Losses of Hot Electrons Interacting with Optical Phonons (T)—B. L. Gel'mont, R. I. Lyagushchenko and I. N. Yassievich. 14(2), 445–52 (Aug. 1972); CPM-7208E0602

Screw Instability in Germanium at Low Temperatures (E)—M. K. Balakirev, A. L. Belostotskii, S. V. Bogdanov and E. P. Zarubin. 14 (3), 589–91 (Sep. 1972); CPM-7209D0023

Recombination Radiation from High-Density Exciton Systems in Silicon (E)—B. M. Ashkinadze and T. Risbaev. 14(3), 596–601 (Sep. 1972); CPM-7209D0030

Coulomb Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei and É. M. Épshtein. 14(3), 632–5 (Sep. 1972); CPM-7209D0066

"Optical Cooling" of Conduction Electrons in Conductors (T)—A. G. Aronov and V. L. Gurevich. 14(4), 966–70 (Oct. 1972); CPM-7210D0781

Mixed Plasmon–Phonon Surface Modes in n-InSb (E/T)—I. I. Reshina, Yu. M. Gerbshtein and D. N. Mirlin. 14(4), 1104–5(C) (Oct. 1972); CPM-7210D0919

Indirect Exchange Interaction of Optically Active Impurities Caused by Plasma Oscillations (T)—B. M. Khabibullin. 14(6), 1448–52 (Dec. 1972); CPM-7212D0784

Damping Effects on the Plasmon–Phonon Spectrum of a Solid (T)— A. A. Kukharskii. 14(6), 1501–6 (Dec. 1972); CPM-7212D0837

Analogy between a Relativistic Plasma and the Electron Gas of a Semiconductor with a Nonquadratic Dispersion Law (T)—F. G. Bass and V. A. Pogrebnyak. 14(6), 1518–20 (Dec. 1972); CPM-7212D0854

Plasmon–Phonon Interaction in Gallium Antimonide (T/E)—N. V. Bozhovskaya and V. K. Subashiev. 14(7), 1627–33 (Jan. 1973); CPM-7301C0587

Electromagnetic Excitations of Two-Component Plasma in Quantizing Magnetic Fields (T)—V. Ya. Demikhovskii and A. P. Protogenov. 14(7), 1686–94 (Jan. 1973); CPM-7301C0646

Effect of Renormalized Plasma Spectrum on the Superconductivity in Semiconductors (T)—A. A. Golub and M. K. Kolpazhiu. 14(7), 1695–8 (Jan. 1973); CPM-7301C0655

Second-Order Raman Scattering of Light by Optical Phonons under Fermi-Resonance Conditions with a Plasmon (T)—N. A. Efremov and E. P. Kaminskaya. 14(7), 1813–9 (Jan. 1973); CPM-7301C0773

Interpretation of the Energy-Loss Peaks in the Range 30–70 eV in the Spectra of Electrons Reflected from Transition Metals (E)—V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin and K. Sh. Chokin. 14(7), 1891–2(C) (Jan. 1973); CPM-7301C0851

Emission Intensity from a Solid-State Plasma with Development of the Bunch Instability (T)—R. R. Kikvidze, V. G. Kotetishvili and A. A. Rukhadze. 14(8), 1931–4 (Feb. 1973); CPM-7302E1057

Fluctuations of Hot Photoelectrons in Semiconductors (T)—L. Ya. Kashchenevskii and I. M. Yakover. 14(8), 1953–5 (Feb. 1973); CPM-7302E1079

Plasma Oscillations in Transition Metals and Alloys (T/E)—E. A. Bakulin, M. M. Brodov and V. A. Vasil'ev. 14(8), 2100–3 (Feb. 1973); CPM-7302E1226

Overheating Instability of Helicons in Finite Semiconductors (T)—A. P. Tetervov and V. M. Yakovenko. 14(9), 2220–3 (Mar. 1973); CPM-7303E1044

Instability of Two-Band Model of Metals with Respect to Annihilation Scattering (T)—Do Chan Kat and Yu. V. Kopaev. 14(9), 2252–8 (Mar. 1973); CPM-7303E1076

Quantum Efficiency in Semiconductors with Kane-Type Band Structure (T)—N. S. Baryshev, K. Ya. Shtivel'man and M. P. Shchetinin. 14(9), 2344–7 (Mar. 1973); CPM-7303E1168

Interpretation of Some Features of Plasma Loss Peaks in the Spectra of Electrons Reflected from Mo (E)—V. V. Zashkvara and V. S. Red'kin. 14(9), 2410–1(C) (Mar. 1973); CPM-7303E1234

Resonant Dynamic Breakdown of Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei, V. V. Pavlovich and E. M. Epshtein. 14(11), 2799–801 (May 1973); CPM-7305D1027

Inductance of Impact-Ionized Plasma in Indium Antimonide (E/T)—V. N. Dobrovol'skii and V. I. Uzhva. 14(12), 2985–7 (Jun. 1973); CPM-7306D0827

Spectrum of Plasma Oscillations in Semimetals (T)—Do Chan Kat and Yu. V. Kopaev. 14(12), 3012–4 (Jun. 1973); CPM-7306D0854

Theory of Damping of Local Vibrations in Semiconductors (T)—V. F. Los'. 14(12), 3048–50 (Jun. 1973); CPM-7306D0890

5.20.70. Spin Systems

"Magnetic Anomalies" in the Mössbauer Effect (T)—V. M. Belova and V. I. Nikolaev. 14(1), 111–6 (Jul. 1972); CPM-7207D1070

Spin–Lattice Relaxation of Energy of Dipole–Dipole Reservoir and Slow Motion in Crystalline Beryllium Oxyacetate (E/T)—V. E. Lyapukhov and O. P. Revokatov. 14(2), 502–3(C) (Aug. 1972); CPM-7208E0659

Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

Surface Influence on the Optical Orientation of Electron Spins in Semiconductors (E)—D. Z. Garbuzov, R. I. Dzhioev, L. M. Kanskaya and V. G. Fleisher. 14(6), 1481–7 (Dec. 1972); CPM-7212D0817

Exchange Broadening of the Hyperfine Components of the ESR Spectrum of Nitrogen in Diamond (E/T)—L. A. Shul'man and G. A. Podzyarei. 14(6), 1521–6 (Dec. 1972); CPM-7212D0857

Forbidden Transitions in Degenerate Spin Systems (E/T)—B. F. Alekseev and A. S. Serdyuk. 14(6), 1535–6(C) (Dec. 1972); CPM-7212D0871

Localized States of Spin Systems with Two-Dimensional Defects (T)—V. I. Khokhlov. 14(6), 1577–8(C) (Dec. 1972); CPM-7212D0913

Mössbauer Determination of Orientation of Spins in the Tetrahedral Sublattice of $Bi_2Fe_4O_9$ (E/T)—V. A. Bokov, A. S. Kamzin and G. Ya. Karapet'yan. 14(8), 2168–70(C) (Feb. 1973); CPM-7302E1294

EPR Line Shape in the Presence of the Spin–Phonon and Static Portions of Dipole–Dipole Interactions (T)—B. E. Vugmeister, V. L. Gokhman and V. Ya. Zevin. 14(9), 2280–4 (Mar. 1973); CPM-7303E1104

Instability of Uniform Oscillations of the Magnetic Moment of a Ferromagnet (T)—V. G. Bar'yakhtar, B. A. Ivanov and A. G. Kvirikadze. 14(9), 2385–6(C) (Mar. 1973); CPM-7303E1209

Parametric Excitation of Spin Waves in Ferromagnets with Magnetic Inhomogeneities (T)—V. E. Zakharov and V. S. L'vov. 14(10), 2513–9 (Apr. 1973); CPM-7304E1159

Angular Spin Configurations in $MnCrFeO_4$ (E)—I. S. Lyubutin, T. V. Dmitrieva and L. M. Belyaev. 14(10), 2579–80 (Apr. 1973); CPM-7304E1225

Degeneracy of Spin States in Complexes of Paramagnetic Ions (T)—B. A. Men', A. N. Men' and V. I. Cherepanov. 14(12), 2931–5 (Jun. 1973); CPM-7306D0773

5.20.80. Electronic Surface States and Energy Band Structure

5.20.80.15. Forces and Interactions

Transmission of Information through Au Boundary Layers (E)—G. I. Distler, V. G. Obronov and Yu. M. Gerasimov. 14(3), 580–3 (Sep. 1972); CPM-7209D0014

5.20.80.20. Surface States, Barriers and Work Functions

Adsorption of Barium on Platinum (E)—Yu. V. Zubenko. 14(2), 377–9 (Aug. 1972); CPM-7208E0534

Surface Excitons in an Insulator Bounded by a Metal (T)—V. M. Agranovich, A. G. Mal'shukov and M. A. Mekhtiev. 14(3), 725–31 (Sep. 1972); CPM-7209D0159

Mixed Plasmon–Phonon Surface Modes in n-InSb (E/T)—I. I. Reshina, Yu. M. Gerbshtein and D. N. Mirlin. 14(4), 1104–5(C) (Oct. 1972); CPM-7210D0919

Connection Between Electrical Breakdown and the Form of the Volt—Ampere Characteristics of the Autoemission Current From p–Ge (E)—P. G. Shlyakhtenko, R. Z. Bakhtizin and N. V. Mileshkina. 14(5), 1320–2(C) (Nov. 1972); CPM-7211A1572

Surface Influence on the Optical Orientation of Electron Spins in Semiconductors (E)—D. Z. Garbuzov, R. I. Dzhioev, L. M. Kanskaya and V. G. Fleisher. 14(6), 1481–7 (Dec. 1972); CPM-7212D0817

Surface Excitons and their Effect on Optical Properties of Crystals (T)—V. I. Sugakov. 14(7), 1711–7 (Jan. 1973); CPM-7301C0671

Effect of Boundary Conditions on the Distribution of Spins near the Surface of a Ferromagnet (T/E)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1791–3 (Jan. 1973); CPM-7301C0751

Surface Ionization of Alkali–Metal Atoms on a Silicon Carbide Single Crystal (E)—L. I. Kaisheva. 14(8), 2108–9(C) (Feb. 1973); CPM-7302E1234

Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Surface Electronic States in a KCl Crystal (T)—S. G. Zavt and T. Ya. Saks. 14(10), 2502–4 (Apr. 1973); CPM-7304E1148

Changes in the Work Function of Electrons Emitted from Centers in Gold Films Activated with Barium Oxide (E)—Yu. A. Kulyupin and R. D. Fedorovich. 14(10), 2663–4(C) (Apr. 1973); CPM-7304E1309

Absorption of Surface Acoustic Waves in Superconductors (T)—G. A. Sorokin. 14(11), 2683–5 (May 1973); CPM-7305D0911

Surface Electric Field Arising from Three–Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Surface Excitons and Phonons at a Metal–Insulator Interface in the Presence of Charge Transfer (T)—V. M. Agranovich. 14(12), 3085–6(C) (Jun. 1973); CPM-7306D0927

5.20.80.30. Impurity Levels

Spectral Investigation of Auto–Photoemission from CdS Single Crystals under Pulsed and Constant Voltage Conditions (E)—B. V. Novikov, A. E. Cherednichenko and P. G. Shlyakhtenko. 14(1), 14–7 (Jul. 1972); CPM-7207D0973

Thermal Ionization of Deep Centers in the Space–Charge Region of Semiconductors (T)—S. F. Timashev. 14(1), 136–8 (Jul. 1972); CPM-7207D1095

Impurity–Level Energies in Magnesium Phthalocyanine Films (E)—V. A. Benderskii, A. I. Belkind, M. I. Fedorov and S. B. Aleksandrov. 14(3), 674–7 (Sep. 1972); CPM-7209D0108

5.20.90. Other Topics in Energy States in Solids

Fine Structure of the Bielectron or Bihole Energy Levels in BiI_3 Crystals (E)—E. F. Gross, N. V. Starostin, M. P. Shepilov and R. I. Shekhmamet'ev. 14(7), 1681–5 (Jan. 1973); CPM-7301C0641

5.25. MECHANICAL AND ACOUSTICAL PHENOMENA

5.25.10. Elasticity

5.25.10.20. Elastic Constants and Moduli

Temperature Dependences of the Elastic Constants of Bismuth (E)—Yu. A. Burenkov, A. A. Valiev, S. P. Nikanorov and A. V. Stepanov. 14(1), 215–6(C) (Jul. 1972); CPM-7207D1174

Temperature Dependence of the Elastic Constants for Crystals Having the Diamond Structure (T)—A. I. Gubanov and S. Yu. Davydov. 14(2), 372–6 (Aug. 1972); CPM-7208E0529

Correction to the Papers "Temperature Dependence of the Elastic Constants for Crystals Having the Diamond Structure" and "Anharmonic Properties of Crystals Having the Zinc–Blende Lattice" [14, 372 (1972)] (T)—A. I. Gubanov and S. Yu. Davydov. 14(7), 1897(C) (Jan. 1973); CPM-7301C0857

Internal Friction and Relative Value of Young's Modulus of Niobium in Normal and Superconducting States (E)—V. S. Postnikov, I. V. Zolotukhin and V. E. Miloshenko. 14(3), 809–10(C) (Sep. 1972); CPM-7209D0243

Anharmonic Properties of Crystals having the Zinc Blende Lattice (T)—A. I. Gubanov and S. Yu. Davydov. 14(4), 1020–3 (Oct. 1972); CPM-7210D0835

Anisotropic Linear Expansion and the Isothermal Compressibility of a GaSe Single Crystal (E)—N. G. Aliev, I. G. Kerimov, M. M. Kurbanov and T. A. Mamedov. 14(5), 1304–5(C) (Nov. 1972); CPM-7211A1556

Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

Pressure Dependences of the Elastic Moduli of InSb (E)—G. I. Peresada. 14(6), 1546–7(C) (Dec. 1972); CPM-7212D0882

Elastic Constants of ZnSe (E)—V. I. Kuskov, A. P. Rusakov and A. N. Mentser. 14(7), 1869–70(C) (Jan. 1973); CPM-7301C0829

"Magnetic Anomaly" of the Probability of the Mössbauer Effect in Invar (E)—V. M. Belova, E. A. Brychkov, E. K. Zakharov, V. I. Nikolaev and S. S. Yakimov. 14(9), 2404–5(C) (Mar. 1973); CPM-7303E1228

Relationship between Elastic Moduli at Finite Temperatures (T)—Yu. Kh. Vekilov, O. M. Krasil'nikov and Yu. A. Lisovskii. 14(10), 2634–5(C) (Apr. 1973); CPM-7304E1280

Elastic Properties and Strength of Germanium Whiskers (E)—V. S. Postnikov, S. A. Ammer and A. I. Drozhzhin. 14(10), 2636–7(C) (Apr. 1973); CPM-7304E1282

Densities of Quantum States for the Elements and Their Compressibilities (T)—Yu. V. Zheltov and L. D. Sokolov. 14(11), 2784–6 (May 1973); CPM-7305D1012

Thermal Expansion and Isothermal Compressibility of Indium Chalcogenide Single Crystals (E)—N. G. Aliev, I. G. Kerimov and M. M. Kurbanov. 14(12), 3106–7(C) (Jun. 1973); CPM-7306D0948

5.25.10.90. Other Topics in Elasticity

Dynamic Elasticity of Polyolefins (E/T)—Yu. A. Antsupov, V. P. Volodin, E. V. Kuvshinskii and Yu. N. Fedorov. 14(4), 952–4 (Oct. 1972); CPM-7210D0767

5.25.20. Deformation, Strain, Shear and Stress

Influence of Zero Energy on the Plastic Deformation of Hydrogen (E)—Yu. E. Stetsenko, D. N. Bol'shutkin, L. A. Indan and A. A. Khudoteplaya. 14(1), 149–51 (Jul. 1972); CPM-7207D1108

Influence of Placing Dislocations at Starting Positions on the Kinetics of Dislocation Motion in NaCl Crystals (E)—V. A. Makara, N. N. Novikov and O. V. Rudenko. 14(1), 261–3(C) (Jul. 1972); CPM-7207D1220

Mechanical Properties and Dislocation Structure of Alkali Halide Crystals in Single Slip (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(2), 487–9(C) (Aug. 1972); CPM-7208E0644

Effect of Dimensional Factors on Slip and Hardening of Silicon Iron Single Crystals (E)—L. G. Orlov and G. F. Shitikova. 14(2), 507–8 (C) (Aug. 1972); CPM-7208E0664

Spontaneous Change in the Radius of Curvature of Plastically Deformed Silicon Slices (E)—P. V. Pavlov, V. I. Pashkov, G. I. Uspenskaya and Z. N. Gurevich. 14(2), 537–8(C) (Aug. 1972); CPM-7208E0694

"Deformation Memory" in Crystals (E/T)—V. G. Govorkov, G. V. Berezhkova, V. R. Regel' and E. P. Kozlovskaya. 14(2), 546(C) (Aug. 1972); CPM-7208E0703

Influence of the Deformation Method on the Nature of Dislocation Loops in Aluminum (E)—M. M. Myshlyaev, S. S. Olevskii, S. K. Maksimov and V. A. Likhachev. 14(3), 785–6(C) (Sep. 1972); CPM-7209D0219

Effect of Form of Inelastic Deformation on Intermolecular Reaction in Polymers (E/T)—V. A. Bershtein, N. A. Kaltnina, S. V. Savin and V. A. Stepanov. 14(4), 975–7 (Oct. 1972); CPM-7210D0790

Effect of Mechanical Stress on the Shapes of Dislocation Etch Pits in Silicon (E)—V. A. Mal'tseva, B. D. Platonov, S. Yu. Sofronova and Ya. M. Bekker. 14(4), 1053–4(C) (Oct. 1972); CPM-7210D0868

Slip Polygonization in Silicon Iron Single Crystals Deformed by Tensile Forces (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(4), 1075–6(C) (Oct. 1972); CPM-7210D0890

Effect of Ultrasonic Vibrations on a Crystal's Resistance to Plastic Deformation (E)—I. A. Gindin, I. M. Neklyudov, G. N. Malik and O. T. Rozumnyi. 14(5), 1126–30 (Nov. 1972); CPM-7211A1378

Deformation Luminescence of KCl:Ag Crystals (E)—I. A. Markova–Osorgina, F. D. Senchukov and S. Z. Shmurak. 14(5), 1236–8 (Nov. 1972); CPM-7211A1488

Flashes of Luminescence on Unloading Plastically Deformed Alkali Halide Crystals (E)—F. D. Senchukov and S. Z. Shmurak. 14(5), 1336–7(C) (Nov. 1972); CPM-7211A1588

Ferromagnetic Resonance in Plastically Deformed Permalloy and Iron (E)—E. F. Kondrat'ev, V. G. Pinchuk and V. M. Slobodyanik. 14(5), 1352–3(C) (Nov. 1972); CPM-7211A1604

Effect of Dislocation Broadening on the Shape of a Nuclear Magnetic Resonance Line (E)—Yu. A. Grinchenko and B. L. Timan. 14(6), 1404–7 (Dec. 1972); CPM-7212D0740

Investigation of the Dislocation Structure of Stretch–Deformed Copper Whikers by Analysis of Lattice Disorientations (E)—V. S. Postnikov, A. M. Belikov, A. T. Kosilov and V. B. Shepilov. 14(6), 1529–30(C) (Dec. 1972); CPM-7212D0865

Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Photodomain Effect and Deformation in SbSI Single Crystals (E)—A. A. Grekov, R. E. Pasynkov and E. D. Rogach. 14(8), 1919–21 (Feb. 1973); CPM-7302E1045

Theory of Deformation–Concentration Instability in Semiconductors (T)—V. I. Pipa and V. N. Piskovoi. 14(8), 1979–84 (Feb. 1973); CPM-7302E1105

Influence of Space Charge on the Strength of Small–Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Doroshenko, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5(C) (Feb. 1973); CPM-7302E1230

Polygonization by Slip in Silicon Iron Single Crystals Deformed by Tension at −196°C (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(8), 2110–1(C) (Feb. 1973); CPM-7302E1236

Calculation of the Distribution of Stresses between Atomic Bonds from Infrared Spectroscopy Data (T/E)—V. A. Kosobukin. 14(9), 2246–51 (Mar. 1973); CPM-7303E1070

Elastic Deformations Arising during Crystal Growth (T)—L. A. Pastur and É. P. Fel'dman. 14(9), 2322–4 (Mar. 1973); CPM-7303E1146

Influence of Internal Stresses on Magnetic Birefringence of Yttrium Ferrite Garnet (E)—V. A. Babko and V. D. Tron'ko. 14(9), 2426–7(C) (Mar. 1973); CPM-7303E1250

Relationships Governing the Initial Stage of Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(9), 2440–1(C) (Mar. 1973); CPM-7303E1264

Periodic Dichroism of Colored Alkali Halide Crystals Introduced by Plastic Deformation (E)—V. M. Bezruchko. 14(10), 2527–30 (Apr. 1973); CPM-7304E1173

Effect of Microcracks on the Local Stress Distribution in Polymers and Their Deformation Properties. Network Model (T)—Yu. Ya. Gotlib, A. M. El'yashevich and Yu. E. Svetlov. 14(11), 2672–7 (May 1973); CPM-7305D0900

Elastic Stresses and Strains at the Interface of an Epitaxial β–Co—Cu Bicrystal (T/E)—B. G. Bord, L. S. Palatnik, A. I. Fedorenko and É. P. Fel'dman. 14(11), 2700–3 (May 1973); CPM-7305D0928

Effect of Ultrasonic Irradiation on the Development of Twinning in Cadmium (E)—I. A. Gindin, O. I. Volchok and I. M. Neklyudov. 14(11), 2762–3 (May 1973); CPM-7305D0990

Effect of Uniaxial Deformation on the Absorption Spectrum of Bismuth Iodide Crystals (E)—E. F. Gross, D. L. Fedorov and R. I. Shekhmamet'ev. 14(11), 2767–9 (May 1973); CPM-7305D0995

Changes in Mechanical Stress of Cadmium Telluride Thin Films Caused by Photostimulated Adsorption of Oxygen (E)—A. I. Vovsi and L. I. Straklov. 14(11), 2863–5 (May 1973); CPM-7305D1091

Formation of Large-Angle Grain Boundaries Under the Influence of Mechanical Stresses (E)—Zh. I. Dranova and I. M. Mikhailovskii. 14(12), 3104–5(C) (Jun. 1973); CPM-7306D0946

5.25.30. Plasticity

5.25.30.20. Slip

Velocity of Slip Bands with Respect to the (100) [110] and (110) [110] Systems in Sodium Chloride Crystals (E)—O. V. Klyavin, S. G. Simashko and A. V. Stepanov. 14(1), 130–5 (Jul. 1972); CPM-7207D1089

Mechanical Properties and Dislocation Structure of Alkali Halide Crystals in Single Slip (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(2), 487–9(C) (Aug. 1972); CPM-7208E0644

Effect of Dimensional Factors on Slip and Hardening of Silicon Iron Single Crystals (E)—L. G. Orlov and G. F. Shitikova. 14(2), 507–8 (C) (Aug. 1972); CPM-7208E0664

Accumulation of Dislocations in Random Fields of Internal Stresses and the Initial Stage in the Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(4), 920–6 (Oct. 1972); CPM-7210D0735

Slip Polygonization in Silicon Iron Single Crystals Deformed by Tensile Forces (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(4), 1075–6(C) (Oct. 1972); CPM-7210D0890

Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744

Influence of Slip and Mechanical Twinning on the Density of Iron (E)—I. A. Gindin, V. M. Rozenberg, Ya. D. Starodubov and L. A. Chirkina. 14(6), 1414–6 (Dec. 1972); CPM-7212D0750

Fine Structure of a Moving Superdislocation (T)—V. T. Neumerzhitskii and E. V. Kozlov. 14(6), 1428–30 (Dec. 1972); CPM-7212D0764

Influence of a Dislocation Forest on the Parameters of the Dislocation Structure of Slip Bands in LiF Crystals (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(6), 1585–7(C) (Dec. 1972); CPM-7212D0921

Polygonization by Slip in Silicon Iron Single Crystals Deformed by Tension at −196°C (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(8), 2110–1(C) (Feb. 1973); CPM-7302E1236

Intersecting Pile-Ups of Edge Dislocations (T)—R. G. Aitynbaev and Sh. Kh. Khannanov. 14(9), 2439(C) (Mar. 1973); CPM-7303E1263

Effect of Ultrasonic Irradiation on the Development of Twinning in Cadmium (E)—I. A. Gindin, O. I. Volchok and I. M. Neklyudov. 14(11), 2762–3 (May 1973); CPM-7305D0990

Kinetics of Motion of Slip Bands in NaCl Crystals (E)—S. I. Zaitsev and E. M. Nadgornyi. 14(11), 2787–90 (May 1973); CPM-7305D1015

5.25.30.30. Yield

Influence of a Dislocation Forest on the Parameters of the Dislocation Structure of Slip Bands in LiF Crystals (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(6), 1585–7(C) (Dec. 1972); CPM-7212D0921

5.25.30.40. Creep

Mosaic Structure of Germanium in Longevity and Creep Testing (E)—A. N. Bakhtibaev, V. I. Betekhtin, S. A. Ivanov, M. M. Myshlyaev and I. I. Khodos. 14(1), 117–21 (Jul. 1972); CPM-7207D1076

Influence of the Deformation Method on the Nature of Dislocation Loops in Aluminum (E)—M. M. Myshlyaev, S. S. Olevskii, S. K. Maksimov and V. A. Likhachev. 14(3), 785–6(C) (Sep. 1972); CPM-7209D0219

Change in the Electrical Resistivity of Lead after Creep in the Normal and Superconducting States (E)—I. A. Gindin, V. P. Lebedev and Ya. D. Starodubov. 14(7), 1748–51 (Jan. 1973); CPM-7301C0708

Defects in Semiconducting Silicon Carbide Crystals (E)—A. S. Tregubova and I. L. Shul'pina. 14(9), 2305–8 (Mar. 1973); CPM-7303E1129

Negative Creep During Bending of Boron-Doped Silicon (E)—V. A. Shmidt. 14(12), 3077(C) (Jun. 1973); CPM-7306D0919

5.25.30.90. Other Effects and Technological Rheological Properties

Behavior of Stress Relaxation During a Superconducting Transition (E)—V. I. Dotsenko, V. V. Pustovalov and V. S. Fomenko. 14(1), 161–4 (Jul. 1972); CPM-7207D1120

Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Relationships Governing the Initial Stage of Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(9), 2440–1(C) (Mar. 1973); CPM-7303E1264

Periodic Dichroism of Colored Alkali Halide Crystals Introduced by Plastic Deformation (E)—V. M. Bezruchko. 14(10), 2527–30 (Apr. 1973); CPM-7304E1173

5.25.40. High-Pressure Effects in Solids

Superconductivity of Bismuth Phases Produced at Pressures Up to 30 kbar (E)—M. A. Il'ina and E. S. Itskevich. 14(2), 328–31 (Aug. 1972); CPM-7208E0485

Effect of Pressure on the Superconductivity of Niobium Diselenide (E)—M. A. Il'ina, E. S. Itskevich and G. A. Kalyuzhnaya. 14(2), 428–30 (Aug. 1972); CPM-7208E0585

Light Emission from $BaTiO_3$ Crystals Subjected to Uniaxial Stress Pulses (E)—S. A. Flerova and Yu. I. Samchenko. 14(2), 498–9(C) (Aug. 1972); CPM-7208E0655

Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

Effect of Pressure on Galvanomagnetic Phenomena in Rare Earth Metals (E)—L. I. Vinokurova, E. I. Kondorskii, Kh. Rakhimova and V. Yu. Ivanov. 14(3), 613–9 (Sep. 1972); CPM-7209D0047

Fermi Surface of Cadmium under Pressure (E)—A. A. Galkin, E. P. Degtyar', S. E. Zhevago and A. I. Popovich. 14(3), 787–8(C) (Sep. 1972); CPM-7209D0221

Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14(4), 971–4 (Oct. 1972); CPM-7210D0786

Retaining the Metastable High-Pressure Phases of CdS, Mg_2Sn, SnTe, and SnTe–GeTe Alloys (E)—Z. V. Malyushitskaya, S. S. Kabalkina and L. F. Vereshchagin. 14(4), 1040–5 (Oct. 1972); CPM-7210D0855

Dependence of the Magnetic Anisotrophy of Yttrium Iron Garnet on Pressure and Temperature (E/T)—Yu. A. Timofeev, E. N. Yakovlev and A. N. Ageev. 14(5), 1131–5 (Nov. 1972); CPM-7211A1383

Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

Piezoelectric Properties of Polarized $BaTiO_3$ Ceramics Subjected to Uniaxial Transverse Compression (E)—E. V. Sinyakov, A. I. Gavrilishina and S. A. Flerova. 14(5), 1302–3(C) (Nov. 1972); CPM-7211A1554

Residual Action of High Pressure on the Width of Ferromagnetic Resonance Lines in $Y_3Fe_{5-x}Ga_xO_{12}$ Single Crystals (E)—V. A. Korchin, V. A. Ruban, V. V. Danilov and V. V. Zaporozhets. 14(5), 1329–30(C) (Nov. 1972); CPM-7211A1581

Magnetic Transformation in Manganese Arsenide Induced by a Strong Magnetic Field (E)—A. A. Galkin and E. A. Zavadskii. 14(6), 1507–9 (Dec. 1972); CPM-7212D0843

Pressure Dependences of the Elastic Moduli of InSb (E)—G. I. Peresada. 14(6), 1546–7(C) (Dec. 1972); CPM-7212D0882

Pressure-Induced Transition in RbI at Low Temperatures (E)—V. N. Laukhin, A. G. Rabin'kin and E. I. Estrin. 14(6), 1551–3(C) (Dec. 1972); CPM-7212D0887

Mössbauer Effect and Superconductivity of Tin under Pressure (T/E)—V. N. Panyushkin and E. N. Yakovlev. 14(6), 1579–80(C) (Dec. 1972); CPM-7212D0915

Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

High-Pressure Phase Transitions of the First Kind in Rochelle Salt (E)—V. P. Mylov, G. G. Leonidova and B. R. Churagulov. 14(7), 1893–4(C) (Jan. 1973); CPM-7301C0853

Characteristics of the Alpha→Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148

Light-Scattering Investigation of Precipitation of a Supersaturated Solution of Barium in a KCl Crystal (E)—Ya. E. Geguzin and V. G. Kononenko. 14(9), 2181–6 (Mar. 1973); CPM-7303E1005

Superconducting Properties of Tellurium at Pressures up to 260 kbar (E)—I. V. Berman, Zh. I. Bynzarov and Yu. P. Kurkin. 14(9), 2192–4 (Mar. 1973); CPM-7303E1016

Precipitation of Solid Solutions of Strontium and Cadmium in KCl Single Crystals (E)—V. G. Kononenko and V. D. London. 14(9), 2217–9 (Mar. 1973); CPM-7303E1041

Semimetal–Semiconductor Transition in Bismuth under the Influence of Pressure (E)—V. A. Venttsel' and A. V. Rakhmanina. 14(9), 2325–7 (Mar. 1973); CPM-7303E1149

Superconductivity of Lanthanum at Pressures up to 250 kbar (E)—O. A. Zarubina. 14(10), 2497–9 (Apr. 1973); CPM-7304E1143

Piezospectroscopic Investigation of Excited Exciton States in Cubic ZnS Single Crystals (E)—L. G. Suslina and D. L. Fedorov. 14(10), 2575–8 (Apr. 1973); CPM-7304E1221

Effect of Uniaxial Deformation on the Absorption Spectrum of Bismuth Iodide Crystals (E)—E. F. Gross, D. L. Fedorov and R. I. Shekhmamet'ev. 14(11), 2767–9 (May 1973); CPM-7305D0995

Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14(11), 2835–7 (May 1973); CPM-7305D1063

Influence of Pressure on the Thermodynamic Properties of NH_4Cl near the Phase Transition Point (E)—E. B. Amitin, Yu. A. Kovalevskaya and I. E. Paukov. 14(11), 2902–3(C) (May 1973); CPM-7305D1130

Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133

Influence of Uniaxial Compression on the Anisotropy of the Electroabsorption of Light in GaAs (E)—Yu. N. Berozashvili, O. V. Gogolin and D. Sh. Lordkipanidze. 14(11), 2926–7(C) (May 1973); CPM-7305D1154

Influence of Pressure on the Hall Effect in Dysprosium Single Crystals (E)—L. I. Vinokurova, E. I. Kondorskii, V. Yu. Ivanov, V. M. Murav'eva and Kh. Rakhimova. 14(12), 2981–4 (Jun. 1973); CPM-7306D0823

5.25.45. Anelasticity of Solids and Internal Friction

Internal Friction of Aluminum Oxide Ceramics (E)—Yu. S. Balashov, V. N. Batygin, A. A. Sobolev and É. I. Puzyrev. 14(2), 563–4(C) (Aug. 1972); CPM-7208E0720

Internal Friction and Relative Value of Young's Modulus of Niobium in Normal and Superconducting States (E)—V. S. Postnikov, I. V. Zolotukhin and V. E. Miloshenko. 14(3), 809–10(C) (Sep. 1972); CPM-7209D0243

Effect of Form of Inelastic Deformation on Intermolecular Reaction in Polymers (E/T)—V. A. Bershtein, N. A. Kalinina, S. V. Savin and V. A. Stepanov. 14(4), 975–7 (Oct. 1972); CPM-7210D0790

Inelastic Phenomena in Sodium Chloride Whiskers (E)—L. B. Zuev, V. D. Mal'tsev, L. M. Vysoven' and V. A. Stupin. 14(4), 1096–7 (C) (Oct. 1972); CPM-7210D0911

Influence of Domain Structure on the Internal Friction of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and E. P. Kashchenko. 14(8), 2171–2(C) (Feb. 1973); CPM-7302E1297

Amplitude-Dependent Internal Friction in Superconducting and Normal Indium (E)—V. Ya. Platkov, L. N. Polunina and V. I. Startsev. 14(9), 2400–1(C) (Mar. 1973); CPM-7303E1224

Elastic Properties and Strength of Germanium Whiskers (E)—V. S. Postnikov, S. A. Ammer and A. I. Drozhzhin. 14(10), 2636–7(C) (Apr. 1973); CPM-7304E1282

Internal Friction in Pure Tellurium Single Crystals (E)—G. B. Bagduev, A. M. Magdiev, E. K. Naimi and N. A. Tyapunina. 14(10), 2650–1(C) (Apr. 1973); CPM-7304E1296

Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

5.25.50. Technological Mechanical Properties

5.25.50.40. Fatigue, Fracture, Rupture and Cracking

Kinetics of the Formation of Submicroscopic Cracks in Polymers Under Load (E)—M. A. Gezalov, V. S. Kuksenko and A. I. Slutsker. 14(2), 344–8 (Aug. 1972); CPM-7208E0501

Relationship between the Spectrum of Waves Emitted by a Growing Crack and the Energy Reserve at Its Tip (E)—I. S. Guz' and V. M. Finkel'. 14(7), 1619–22 (Jan. 1973); CPM-7301C0579

Stress Dependence of the Activation Energy for Rupture Processes (T)—V. I. Vladimirov. 14(8), 1969–75 (Feb. 1973); CPM-7302E1095

Barkhausen Jumps and Stabilization of the Spontaneous Polarization of Single Crystals of $BaTiO_3$ (E)—V. M. Rudyak, A. Yu. Kudzin and T. V. Panchenko. 14(8), 2112–3(C) (Feb. 1973); CPM-7302E1238

Accelerating Effect of Ultraviolet Radiation on Submicroscopic Crack Formation in Loaded Polymers (E)—Kh. Akimbekov, V. S. Kuksenko, S. Nizamidinov, A. I. Slutsker and A. A. Yastrebinskii. 14(9), 2339–43 (Mar. 1973); CPM-7303E1163

Influence of Mechanical Stresses on the Hydrolysis of Bonds on the Surface of Glass (E)—V. A. Bershtein, Yu. N. Movchan and V. V. Nikitin. 14(9), 2422–3(C) (Mar. 1973); CPM-7303E1246

Effect of Microcracks on the Local Stress Distribution in Polymers and Their Deformation Properties. Network Model (T)—Yu. Ya. Gotlib, A. M. El'yashevich and Yu. E. Svetlov. 14(11), 2672–7 (May 1973); CPM-7305D0900

5.25.50.90. Other Technological Mechanical Properties

Effect of Dimensional Factors on Slip and Hardening of Silicon Iron Single Crystals (E)—L. G. Orlov and G. F. Shitikova. 14(2), 507–8 (C) (Aug. 1972); CPM-7208E0664

Influence of Space Charge on the Strength of Small-Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Doroshenko, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5(C) (Feb. 1973); CPM-7302E1230

Elastic Properties and Strength of Germanium Whiskers (E)—V. S. Postnikov, S. A. Ammer and A. I. Drozhzhin. 14(10), 2636–7(C) (Apr. 1973); CPM-7304E1282

5.25.70. Mechanical and Acoustic Waves in Solids

5.25.70.20. Propagation of Elastic and Acoustic Waves (Including Ultrasonic Waves)

Dispersion of Elastic Waves in Ferroelectrics (T/E)—K. K. Ermilin, V. A. Krasil'nikov and V. M. Prokhorov. 14(1), 251–2(C) (Jul. 1972); CPM-7207D1210

Nonlinear Effects in the Propagation of Finite-Amplitude Hypersonic Waves in Ferroelectric Crystals (T/E)—N. R. Valitova and K. V. Goncharov. 14(3), 768–70(C) (Sep. 1972); CPM-7209D0202

Effect of a Strong Electric Field on the Interaction of Electrons with High-Frequency Ultrasound (T)—P. E. Zil'berman and A. G. Mishin. 14(3), 771–2(C) (Sep. 1972); CPM-7209D0205

Dynamic Elasticity of Polyolefins (E/T)—Yu. A. Antsupov, V. P. Volodin, E. V. Kuvshinskii and Yu. N. Fedorov. 14(4), 952–4 (Oct. 1972); CPM-7210D0767

Interaction of Stress Waves with a Boundary in an LiF Bicrystal (E)—I. S. Guz' and G. S. Demina. 14(4), 1087–8(C) (Oct. 1972); CPM-7210D0902

Nonlinear Effects in the Propagation of a High-Intensity Surface Acoustic Wave in a Semiconductor (T)—Yu. V. Gulyaev and V. V. Denisenko. 14(5), 1264–6 (Nov. 1972); CPM-7211A1516

Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

Pressure Dependences of the Elastic Moduli of InSb (E)—G. I. Peresada. 14(6), 1546–7(C) (Dec. 1972); CPM-7212D0882

Relationship between the Spectrum of Waves Emitted by a Growing Crack and the Energy Reserve at Its Tip (E)—I. S. Guz' and V. M. Finkel'. 14(7), 1619–22 (Jan. 1973); CPM-7301C0579

Elastic Constants of ZnSe (E)—V. I. Kuskov, A. P. Rusakov and A. N. Mentser. 14(7), 1869–70(C) (Jan. 1973); CPM-7301C0829

Magnetic Field Dependence of the Velocity of Sound in Ferromagnets and Antiferromagnets (T/E)—V. I. Shcheglov. 14(7), 1889–90(C) (Jan. 1973); CPM-7301C0849

Nonlinear Effects in the Propagation of Sound in a Ferroelectric Close to the Phase Transition (E)—O. Yu. Serdobol'skaya and Kuak Tkhi Tam. 14(8), 2114–5(C) (Feb. 1973); CPM-7302E1240

Temperature Dependence of the Velocity of Ultrasound in Silicate Glasses at Liquid–Helium Temperatures (E)—Yu. S. Balashov and A. V. Chernyshov. 14(8), 2155–6(C) (Feb. 1973); CPM-7302E1281

5.25.70.30. Attenuation of Elastic and Acoustic Waves (Other than Ultrasonic)

Role of Hopping Conductivity in Absorption and Dispersion of Hypersound in CdS (E/T)—E. M. Ganapol'skii and V. V. Tarakanov. 14(2), 404–7 (Aug. 1972); CPM-7208E0561

Elastic Wave Damping in Cubic Crystals According to the Akhiezer Mechanism (E)—V. Ya Avdonin, V. V. Lemanov, I. A. Smirnov and V. V. Tikhonov. 14(3), 747–52 (Sep. 1972); CPM-7209D0181

Lattice Absorption of Sound in InSb at 77°K (E/T)—Yu. V. Ilisavskii and D. Chiplis. 14(8), 2085–8 (Feb. 1973); CPM-7302E1211

Absorption of Surface Acoustic Waves in Superconductors (T)—G. A. Sorokin. 14(11), 2683–5 (May 1973); CPM-7305D0911

5.25.70.90. Other Topics in Mechanical and Acoustic Waves in Solids

Radiation of Rayleigh Waves by Edge Dislocations Emerging at the Surface of a Crystal (T)—V. D. Natsik and A. N. Burkanov. 14(5), 1111–6 (Nov. 1972); CPM-7211A1363

Effect of Ultrasonic Vibrations on a Crystal's Resistance to Plastic Deformation (E)—I. A. Gindin, I. M. Neklyudov, G. N. Malik and O. T. Rozumnyi. 14(5), 1126–30 (Nov. 1972); CPM-7211A1378

Decreased Dislocation Density in Crystals Due to the Effect of Ultrasonic Vibrations (E)—I. A. Gindin, O. I. Bolchok, G. N. Malik and I. M. Neklyudov. 14(7), 1828–9(C) (Jan. 1973); CPM-7301C0788

5.25.75. Ultrasonic Absorption and Attenuation in Solids

Calculation of Phonon Absorption of Ultrasonic Waves in Alkali Halide Crystals (T/E)—P. V. Kovalenok and L. G. Merkulov. 14 (2), 283–6 (Aug. 1972); CPM-7208E0440

Acoustic Saturation and Amplification of Na^{23} NMR Lines in $NaNO_3$ Crystals (E/T)—V. M. Sarnatskii and V. A. Shutilov. 14(3), 649–54 (Sep. 1972); CPM-7209D0083

Acoustic Investigations of Sb_2S_3 Crystals (E)—I. P. Grigas, V. F. Kunigelis, A. S. Orlyukas and V. I. Samulionis. 14(3), 796–7(C) (Sep. 1972); CPM-7209D0230

Investigation of High–Frequency Acoustic Harmonics in Alkaline–Earth Metal Fluorides by Means of Braff Light Scattering (E/T)—O. V. Shakin and V. V. Lemanov. 14(5), 1189–92 (Nov. 1972); CPM-7211A1441

Intensity of Induced Mandelstam–Brillouin Scattering in Glasses (E)—V. M. Ryasakov and V. I. Korotkov. 14(7), 1645–8 (Jan. 1973); CPM-7301C0605

Absorption of Ultrasound in Semimetals (T)—I. A. Gilinskii and M. B. Sultanov. 14(7), 1653–9 (Jan. 1973); CPM-7301C0613

Magnetoelastic Attenuation in Nickel at High Ultrasonic Frequencies (E/T)—S. B. Grigor'ev and L. K. Kudryashova. 14(7), 1726–8 (Jan. 1973); CPM-7301C0686

Parametric Excitation of Hypersound in Antiferromagnets (T)—B. A. Ivanov and A. G. Kvirikadze. 14(8), 1976–8 (Feb. 1973); CPM-7302E1102

Inclined Texture Axis in Zinc Oxide Films for Ultrasonic Transducers (E)—N. L. Kenigsberg and A. N. Chernets. 14(9), 2227–9 (Mar. 1973); CPM-7303E1051

Temperature Dependence of the Absorption of Ultrasound in $LiIO_3$ Crystals (E)—A. A. Abramovich, V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov and P. L. Mitnitskii. 14(9), 2237–42 (Mar. 1973); CPM-7303E1061

Amplitude–Dependent Internal Friction in Superconducting and Normal Indium (E)—V. Ya. Platkov, L. N. Polunina and V. I. Startsev. 14(9), 2400–1(C) (Mar. 1973); CPM-7303E1224

Fluctuation Absorption of Sound near the Curie Points of Ferroelectrics That Become Piezoelectric in the Paraelectric Phase (T)—A. P. Levanyuk and N. V. Shchedrina. 14(10), 2581–4 (Apr. 1973); CPM-7304E1227

Effect of Microinhomogeneities on the Electron Absorption of Ultrasound in n–InSb (E/T)—I. L. Drichko and S. I. Kogan. 14 (11), 2856–9 (May 1973); CPM-7305D1084

Low–Temperature Absorption of Ultrasound in Ferromagnetic Insulators with Weak Anisotropy (T)—T. E. Rodkina and V. M. Tsukernik. 14(12), 2956–8 (Jun. 1973); CPM-7306D0798

Electromagnetic Excitation of Sound in Nickel (E)—M. B. Gitis. 14 (12), 2992–5 (Jun. 1973); CPM-7306D0834

Excitation of Ultrasound in Metals by a Beam of Charged Particles (T)—I. A. Akhiezer and V. T. Lazurik–El'tsufin. 14(12), 3093(C) (Jun. 1973); CPM-7306D0935

5.25.80. Acoustoelectric Effect and Acoustic Wave Amplification

Investigation of the Acoustoelectric Instability in CdS by the Scattering of Light by Sound (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(1), 76–82 (Jul. 1972); CPM-7207D1035

Nonlinear Interaction of Hypersonic Waves in a $LiNbO_3$ Crystal (E)—A. V. Pugovkin and S. M. Shandarov. 14(1), 201–2(C) (Jul. 1972); CPM-7207D1160

Acoustoelectric Effect in Tellurium (E)—A. P. Korolyuk and V. F. Roi. 14(1), 211–2(C) (Jul. 1972); CPM-7207D1170

Sound Amplification in n–InSb (E)—Yu. V. Ilisavskii and D. Chiplis. 14(2), 336–9 (Aug. 1972); CPM-7208E0493

Nonmonotonic Conductivity Dependence of the Sound Amplification Threshold in Piezoelectric Semiconductors (E/T)—B. L. Timan, V. D. Ryzhikov and V. K. Komar'. 14(3), 668–70 (Sep. 1972); CPM-7209D0102

Acoustoelectronic Effects in Piezoelectric Semiconductors at Large Acoustic Intensities (E/T)—V. V. Proklov, Yu. V. Gulyaev and A. I. Morozov. 14(4), 832–8 (Oct. 1972); CPM-7210D0647

Intensity of Induced Mandelstam–Brillouin Scattering in Glasses (E)—V. M. Ryasakov and V. I. Korotkov. 14(7), 1645–8 (Jan. 1973); CPM-7301C0605

Amplification and Generation of "Oblique" Transverse Acoustic Waves in a Hexagonal Piezosemiconductor Plate (T)—L. A. Chernozatonskii and V. M. Levin. 14(7), 1783–7 (Jan. 1973); CPM-7301C0743

Acoustoelectric Effect in a Piezoelectric–Semiconductor Layered Structure (E)—A. M. Kmita and A. V. Medved'. 14(9), 2285–93 (Mar. 1973); CPM-7303E1109

Transverse Acoustoelectric Effect (T/E)—Yu. P. Mukhortov, V. I. Pustovoit, I. S. Ravvin and L. A. Chernozatonskii. 14(9), 2300–4 (Mar. 1973); CPM-7303E1124

Temperature Dependence of the Relaxation Time T_2 of the Electroacoustic Echo in Some Piezoelectric Crystals (E)—S. N. Popov and N. N. Krainik. 14(9), 2408–9(C) (Mar. 1973); CPM-7303E1232

Acoustic Resonance in Crystals with Noncentral Impurity Ions (T)—V. S. Vikhnin. 14(9), 2414–5(C) (Mar. 1973); CPM-7303E1238

Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, É. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

5.25.85. Magnetoacoustic Effects

Effect of Spin–Lattice Relaxation and Ultrasound on the Perturbed γ–γ Angular Correlation in Paramagnets (E)—G. A. Denisenko and E. P. Khaimovich. 14(1), 106–10 (Jul. 1972); CPM-7207D1065

Nonlinear Magnetoelastic Phenomena in Ferromagnetic Resonance (T)—I. P. Shantsev and V. E. Shapiro. 14(1), 175–7 (Jul. 1972); CPM-7207D1134

Parametric Excitation of Hypersound in Ferromagnets (T)—A. I. Akhiezer, V. G. Bar'yakhtar and A. G. Kvirikadze. 14(3), 757–9 (Sep. 1972); CPM-7209D0191

Fermi Surface of Cadmium under Pressure (E)—A. A. Galkin, E. P. Degtyar', S. E. Zhevago and A. I. Popovich. 14(3), 787–8(C) (Sep. 1972); CPM-7209D0221

Paramagnetic Resonance Absorption of Ultrasound by Conduction Electrons (T)—S. I. Goryachikh and B. M. Khabibullin. 14(4), 860–3 (Oct. 1972); CPM-7210D0675

Nonlinear Magnetoacoustic Resonance in Ferromagnets (T)—V. P. Lukomskii and Yu. A. Tsvirko. 14(5), 1228–32 (Nov. 1972); CPM-7211A1480

Interaction of Surface Magnetostatic Waves with Elastic Rayleigh Waves in Cubic Ferromagnets (T)—V. I. Shcheglov. 14(6), 1417–20 (Dec. 1972); CPM-7212D0753

Excitation of Magnetoelastic Waves in a Magnesium Spinel Single Crystal (E)—S. A. Mironov, L. Smoczynski, É. V. Rubal'skaya and Yu. M. Yakoviev. 14(6), 1612–4(C) (Dec. 1972); CPM-7212D0948

Absorption of Ultrasound in Semimetals (T)—I. A. Gilinskii and M. B. Sultanov. 14(7), 1653–9 (Jan. 1973); CPM-7301C0613

Electromagnetic Excitations of Two-Component Plasma in Quantizing Magnetic Fields (T)—V. Ya. Demikhovskii and A. P. Protogenov. 14(7), 1686–94 (Jan. 1973); CPM-7301C0646

Interaction of Neutrons and Light with Magnetoscoustic Waves in Crystals Having a Ferromagnetic–Antiferromagnetic Transition (T)—A. É. Ginzburg, L. N. Davydov and Z. A. Spol'nik. 14(7), 1774–8 (Jan. 1973); CPM-7301C0734

Magnetic Field Dependence of the Velocity of Sound in Ferromagnets and Antiferromagnets (T/E)—V. I. Shcheglov. 14(7), 1889–90(C) (Jan. 1973); CPM-7301C0849

Anisotropy of the Magnetoelastic Instability in Crystals (T)—V. D. Burkov and A. V. Vashkovskii. 14(10), 2489–92 (Apr. 1973); CPM-7304E1135

Instability of the State of a Ferrodielectric Plate Against Buildup of Magnetoelastic Oscillations (T)—V. P. Lukomskii and B. N. Filippov. 14(10), 2585–7 (Apr. 1973); CPM-7304E1231

Self-Interaction of Finite-Amplitude Magnetoelastic Waves (E)—Dao Tkhu Nguyen, V. A. Krasil'nikov, S. B. Samorukov and V. I. Uchastkin. 14(10), 2632–3(C) (Apr. 1973); CPM-7304E1278

Magnetoelastic Coupling of Fe^{3+} Ions in Yttrium Iron Garnet (E/T)—É. A. Petrakovskaya and É. M. Smokotin. 14(11), 2888–9(C) (May 1973); CPM-7305D1116

Absorption of Rayleigh Acoustic Waves in Metals in Magnetic Fields (T)—R. G. Mints and G. A. Sorokin. 14(12), 3032–6 (Jun. 1973); CPM-7306D0874

5.25.90. Other Mechanical and Acoustical Effects

Electromagnetic Excitation of Sound in Semimetals in Moderately Strong Magnetic Fields (T/E)—P. E. Zil'berman and V. V. Pavlovich. 14(2), 504–6(C) (Aug. 1972); CPM-7208E0661

"Deformation Memory" in Crystals (E/T)—V. G. Govorkov, G. V. Berezhkova, V. R. Regel' and E. P. Kozlovskaya. 14(2), 546(C) (Aug. 1972); CPM-7208E0703

Acoustic Saturation and Amplification of Na^{23} NMR Lines in $NaNO_3$ Crystals (E/T)—V. M. Sarnatskii and V. A. Shutilov. 14(3), 649–54 (Sep. 1972); CPM-7209D0083

Acoustic Emission in a Thermoelastic Martensite Reaction (E)—R. I. Mints, V. P. Melekhin, I. Yu. Ievlev and V. V. Bukhalenkov. 14(5), 1368–9(C) (Nov. 1972); CPM-7211A1620

Electromechanical Effect on Ionic Crystals (E)—N. V. Zagoruiko, V. I. Savenko and N. N. Bekkauer. 14(8), 2120–2(C) (Feb. 1973); CPM-7302E1246

Influence of Screening of the Width of the "Acoustic" Forbidden Band (T)—B. D. Laikhtman and Yu. V. Pogorel'skii. 14(9), 2393–5(C) (Mar. 1973); CPM-7303E1217

Electromechanical Hysteresis and Photodeformation Effect in SbSI Single Crystals (E)—A. A. Grekov, E. D. Rogach and L. N. Syrkin. 14(9), 2396–7(C) (Mar. 1973); CPM-7303E1220

Acoustic Emission Associated with the Annihilation of Dislocations (T)—V. D. Natsik and K. A. Chishko. 14(11), 2678–82 (May 1973); CPM-7305D0906

Effect of Ultrasonic Irradiation on the Development of Twinning in Cadmium (E)—I. A. Gindin, O. I. Volchok and I. M. Neklyudov. 14(11), 2762–3 (May 1973); CPM-7305D0990

5.30. THERMAL AND THERMODYNAMIC PHENOMENA

5.30.20. Heat Capacity

5.30.20.20. Lattice Heat Capacity

Vacancy Equilibrium and Thermal Expansion of Tungsten at High Temperatures (E)—Ya. A. Kraftmakher. 14(2), 325–7 (Aug. 1972); CPM-7208E0482

Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

Intrinsic Absorption and Thermal Properties of Stibiotantalite (E/T)—V. K. Novik, N. F. Karyakina and V. A. Timoshenkov. 14(5), 1288–90 (Nov. 1972); CPM-7211A1540

Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Klushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

Debye Temperatures of LiF, NaF, and KI (T/E)—V. V. Panchenko and V. A. Yakovlev. 14(10), 2616(C) (Apr. 1973); CPM-7304E1262

5.30.20.40. Electronic Heat Capacity

Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

Optical Properties of Copper–Nickel Alloys in the Visible and Ultraviolet Regions of the Spectrum (E)—I. I. Sasovskaya and M. M. Noskov. 14(4), 857–9 (Oct. 1972); CPM-7210D0672

Effect of Singularities in the Density of Electron States on the Thermodynamics of a Normal Metal (T)—V. G. Bar'yakhtar, V. V. Gann and V. I. Makarov. 14(6), 1477–80 (Dec. 1972); CPM-7212D0813

Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Klushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

5.30.20.90. Other Heat-Capacity Phenomena

Specific Heat of $KMnF_3$ (E)—V. G. Khlyustov, I. N. Flerov, A. T. Silin and A. N. Sal'nikov. 14(1), 139–41 (Jul. 1972); CPM-7207D1098

Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700

Heat of the Semiconductor–Metal Phase Transition in V_2O_3 (E)—V. G. Khlyustov, A. S. Borukhovich and V. A. Perelyaev. 14(7), 1848–9(C) (Jan. 1973); CPM-7301C0808

Domain Structure of Orthoferrites near the Spin Reorientation Temperature and Its Effect on the Phase Transition (E/T)—A. K. Zvezdin and S. G. Kalenkov. 14(10), 2458–61 (Apr. 1973); CPM-7304E1104

Specific Heat Anomaly near an Orientational Phase Transition in Ammonium Bromide (E)—É. N. Kostina and G. A. Mil'ner. 14(11), 2923–5(C) (May 1973); CPM-7305D1151

5.30.40. Phase Properties of Systems

5.30.40.10. General Theory and Measurement Techniques

Theory of Phase Transitions in Boracites (T)—Yu. M. Gufan and V. P. Sakhnenko. 14(7), 1660–5 (Jan. 1973); CPM-7301C0620

5.30.40.20. Critical-Point Phenomena

Effect of Domain Structure on the Behavior of Thermodynamic Parameters near a Critical Point (T)—V. S. Esipov, V. M. Zaprudskii and M. A. Mikulinskii. 14(1), 9–13 (Jul. 1972); CPM-7207D0968

Damping of Oscillations at the Interface Between the Solid and Liquid Phases of Bismuth by a Magnetic Field (E)—G. V. Komarov, K. A. Melikov, M. D. Petropavlovskii and A. R. Regel'. 14(2), 485–6(C) (Aug. 1972); CPM-7208E0642

Phase Diagram of the Three-Dimensional Ising Model Involving the Interaction of First and Second Neighbors (T)—P. N. Vorontsov-Vel'yaminov, N. B. Gromova and I. A. Favorskii. 14(2), 490–2(C) (Aug. 1972); CPM-7208E0647

Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

Phonon Polarization Operator in the Ising Model (T)—V. N. Kashcheev. 14(4), 942–51 (Oct. 1972); CPM-7210D0757

Overheating of the Hexagonal Modification of Zirconium Above the Polymorphic Transition Temperature under Pulse Heating Conditions (E)—M. M. Martynyuk and V. I. Tsapkov. 14(6), 1558–9(C) (Dec. 1972); CPM-7212D0894

Possibility of Electromagnetic Radiation During Phase Transitions (T)—V. N. Bogomolov, E. K. Kudinov and Yu. A. Firsov. 14(7), 1788–90 (Jan. 1973); CPM-7301C0748

Heat of the Semiconductor–Metal Phase Transition in V_2O_3 (E)—V. G. Khlyustov, A. S. Borukhovich and V. A. Perelyaev. 14(7), 1848–9(C) (Jan. 1973); CPM-7301C0808

Fluctuation Absorption of Sound near the Curie Points of Ferroelectrics That Become Piezoelectric in the Paraelectric Phase (T)—A. P. Levanyuk and N. V. Shchedrina. 14(10), 2581–4 (Apr. 1973); CPM-7304E1227

Relaxation of the Fluctuations of Magnetization in Ferromagnets above the Curie Point (T)—G. A. Vugal'ter and S. V. Maleev. 14 (11), 2764–6 (May 1973); CPM-7305D0992

Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

5.30.40.30. Structural Transformation (e.g. Polymorphic, Martensitic, etc.)

Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14 (2), 530–2(C) (Aug. 1972); CPM-7208E0687

Structure of Lead Films on a Tungsten (100) Surface (E)—D. A. Gorodetskii and A. A. Yas'ko. 14(3), 636–8 (Sep. 1972); CPM-7209D0070

Investigation of the Effects of the Glass—Crystal Transition on the Local Surroundings of ^{119}Sn Impurity Atoms in As_2Te_3 and in As_2Se_3-As_2Te_3 Based on the Mössbauer Effect (E)—P. P. Seregin and L. N. Vasil'ev. 14(5), 1325–6(C) (Nov. 1972); CPM-7211A1577

Acoustic Emission in a Thermoelastic Martensite Reaction (E)—R. I. Mints, V. P. Melekhin, I. Yu. Ievlev and V. V. Bukhalenkov. 14 (5), 1368–9(C) (Nov. 1972); CPM-7211A1620

Pressure–Induced Transition in RbI at Low Temperatures (E)—V. N. Laukhin, A. G. Rabin'kin and E. I. Estrin. 14(6), 1551–3(C) (Dec. 1972); CPM-7212D0887

Overheating of the Hexagonal Modification of Zirconium Above the Polymorphic Tranaition Temperature under Pulse Heating Conditions (E)—M. M. Martynyuk and V. I. Tsapkov. 14(6), 1558–9(C) (Dec. 1972); CPM-7212D0894

Impurity Atoms of Sn^{119} in the Helicoidal Antiferromagnet Au_2Mn (E)—N. N. Delyagin, E. N. Kornienko and V. I. Nesterov. 14(6), 1590–1(C) (Dec. 1972); CPM-7212D0926

Transformation of the "Amorphous" Phase of Bismuth Thin Films into the Crystalline Phase at Small Thicknesses (E)—B. I. Belevtsev, Yu. F. Komnik and L. A. Yatsuk. 14(7), 1887–8(C) (Jan. 1973); CPM-7301C0847

Characteristics of the Alpha→Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148

Polygonization by Slip in Silicon Iron Single Crystals Deformed by Tension at −196°C (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(8), 2110–1(C) (Feb. 1973); CPM-7302E1236

X-Ray Diffraction Investigation of the Substructure of Iron Microcrystals (E)—I. P. Kushnir and E. F. Sidokhin. 14(8), 2129–30(C) (Feb. 1973); CPM-7302E1255

Thermal Conductivity of Polymeric Modifications of Nd_2S_3 (E)—I. A. Smirnov, L. S. Parfen'eva, V. M. Sergeeva and T. B. Zhukova. 14 (8), 2142–3(C) (Feb. 1973); CPM-7302E1268

Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Effect of a Glass–Crystal Phase Transition on the Spin–Lattice Relaxation Time (E)—I. G. Gusakovskaya, T. I. Larkina and V. I. Gol'danskii. 14(9), 2274–6 (Mar. 1973); CPM-7303E1098

Initial Permeability of Magnetite in the Region of the Low–Temperature Phase Transition (E)—Yu. D. Tropin and A. A. Lepishev. 14(10), 2654–5(C) (Apr. 1973); CPM-7304E1300

Phase Transitions in Thin Gallium Films Produced by Low–Temperature Condensation (E/T)—B. I. Belevtsev and Yu. F. Komnik. 14(11), 2759–61 (May 1973); CPM-7305D0987

Study of the Magnetic Properties of χ and θ Iron Carbide Using Mössbauer Spectroscopy (E)—Yu. V. Maksimov, I. P. Suzdalev and R. A. Arents. 14(11), 2832–4 (May 1973); CPM-7305D1060

Influence of Pressure on the Thermodynamic Properties of NH_4Cl near the Phase Transition Point (E)—E. B. Amitin, Yu. A. Kovalevskaya and I. E. Paukov. 14(11), 2902–3(C) (May 1973); CPM-7305D1130

Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskii, E. I. Balabanov and A. I. Vasil'ev. 14(12), 3028–31 (Jun. 1973); CPM-7306D0870

5.30.40.40. Phases: Existence, Phase Diagrams, etc.

Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14 (2), 530–2(C) (Aug. 1972); CPM-7208E0687

Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

Retaining the Metastable High–Pressure Phases of CdS, Mg_3Sn, SnTe, and SnTe–GeTe Alloys (E)—Z. V. Malyushitskaya, S. S. Kabalkina and L. F. Vereshchagin. 14(4), 1040–5 (Oct. 1972); CPM-7210D0855

Coalescence in Two–Phase Alloys (T/E)—E. P. Nechiporenko, V. V. Slezov, V. V. Sagalovich, N. E. Sagalovich and V. L. Khrebtov. 14 (5), 1259–63 (Nov. 1972); CPM-7211A1511

Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

Investigation of the Effects of the Glass—Crystal Transition on the Local Surroundings of ^{119}Sn Impurity Atoms in As_2Te_3 and in As_2Se_3-As_2Te_3 Based on the Mössbauer Effect (E)—P. P. Seregin and L. N. Vasil'ev. 14(5), 1325–6(C) (Nov. 1972); CPM-7211A1577

Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

Overheating of the Hexagonal Modification of Zirconium Above the Polymorphic Transition Temperature under Pulse Heating Conditions (E)—M. M. Martynyuk and V. I. Tsapkov. 14(6), 1558–9(C) (Dec. 1972); CPM-7212D0894

Possibility of Electromagnetic Radiation During Phase Transitions (T)—V. N. Bogomolov, E. K. Kudinov and Yu. A. Firsov. 14(7), 1788–90 (Jan. 1973); CPM-7301C0748

Heat of the Semiconductor–Metal Phase Transition in V_2O_3 (E)—V. G. Khlyustov, A. S. Borukhovich and V. A. Perelyaev. 14(7), 1848–9(C) (Jan. 1973); CPM-7301C0808

Switching Effect in Pyrolytic VO_2 Films (E)—A. G. Zhdan, A. S. Darevskii, M. E. Chugunova and I. A. Serbinov. 14(7), 1879–80 (C) (Jan. 1973); CPM-7301C0830

Transformation of the "Amorphous" Phase of Bismuth Thin Films into the Crystalline Phase at Small Thicknesses (E)—B. I. Belevtsev, Yu. F. Komnik and L. A. Yatsuk. 14(7), 1887–8(C) (Jan. 1973); CPM-7301C0847

High–Pressure Phase Transitions of the First Kind in Rochelle Salt (E)—V. P. Mylov, G. G. Leonidova and B. R. Churagulov. 14(7), 1893–4(C) (Jan. 1973); CPM-7301C0853

Characteristics of the Alpha→Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148

Thermal Conductivity of Polymeric Modifications of Nd_2S_3 (E)—I. A. Smirnov, L. S. Parfen'eva, V. M. Sergeeva and T. B. Zhukova. 14 (8), 2142–3(C) (Feb. 1973); CPM-7302E1268

Theory of Ordering in Multicomponent Solid Solutions (T)—D. A. Badalyan and A. G. Khachaturyan. 14(9), 2270–3 (Mar. 1973); CPM-7303E1094

Effect of a Glass–Crystal Phase Transition on the Spin–Lattice Relaxation Time (E)—I. G. Gusakovskaya, T. I. Larkina and V. I. Gol'danskii. 14(9), 2274–6 (Mar. 1973); CPM-7303E1098

Emission of Light from $BaTiO_3$ Crystals During Phase Transitions (E)—S. A. Flerova and Yu. I. Samchenko. 14(9), 2406–7(C) (Mar. 1973); CPM-7303E1230

Initial Permeability of Magnetite in the Region of the Low–Temperature Phase Transition (E)—Yu. D. Tropin and A. A. Lepishev. 14(10), 2654–5(C) (Apr. 1973); CPM-7304E1300

Phase Transitions in Thin Gallium Films Produced by Low–Temperature Condensation (E/T)—B. I. Belevtsev and Yu. F. Komnik. 14(11), 2759–61 (May 1973); CPM-7305D0987

Influence of a Phase Transition of the First Kind on the ESR Spectrum of Mn^{2+} in $(NH_4)_2SO_4$ (E)—R. Yu. Abdulsabirov, Yu. S. Greznev and M. M. Zaripov. 14(11), 2894–5(C) (May 1973); CPM-7305D1122

Influence of Pressure on the Thermodynamic Properties of NH_4Cl near the Phase Transition Point (E)—E. B. Amitin, Yu. A. Kovalevskaya and I. E. Paukov. 14(11), 2902–3(C) (May 1973); CPM-7305D1130

Specific Heat Anomaly near an Orientational Phase Transition in Ammonium Bromide (E)—É. N. Kostina and G. A. Mil'ner. 14 (11), 2923–5(C) (May 1973); CPM-7305D1151

Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskis, E. I. Balabanov and A. I. Vasil'ev. 14(12), 3028–31 (Jun. 1973); CPM-7306D0870

5.30.40.50. Solubility, Segregation and Mixing

Optical Phonons in a System of $Zn_xCd_{1-x}Te$ Mixed Crystals (E)—L. K. Vodop'yanov, E. A. Vinogradov, A. M. Blinov and V. A. Rukavishnikov. 14(1), 219–20(C) (Jul. 1972); CPM-7207D1178

Two Regions of Decomposition of Solid Solutions of Barium in Potassium Chloride Crystals (E)—G. A. Andreev and V. A. Klimov. 14(4), 890–3 (Oct. 1972); CPM-7210D0705

Coalescence in Two–Phase Alloys (T/E)—E. P. Nechiporenko, V. V. Slezov, V. V. Sagalovich, N. E. Sagalovich and V. L. Khrebtov. 14 (5), 1259–63 (Nov. 1972); CPM-7211A1511

Diffusion, Electrotransport, and Solubility of Manganese Impurities in Silicon (E)—M. K. Bakhadyrkhanov, B. I. Boltaks and G. S. Kulikov. 14(6), 1441–4 (Dec. 1972); CPM-7212D0777

Diffusion and Solubility of Helium in NaCl Crystals (E)—N. N. Alekseenko, P. V. Volobuev and P. E. Suetin. 14(8), 2073–5 (Feb. 1973); CPM-7302E1199

Light–Scattering Investigation of Precipitation of a Supersaturated Solution of Barium in a KCl Crystal (E)—Ya. E. Geguzin and V. G. Kononenko. 14(9), 2181–6 (Mar. 1973); CPM-7303E1005

Precipitation of Solid Solutions of Strontium and Cadmium in KCl Single Crystals (E)—V. G. Kononenko and V. D. London. 14(9), 2217–9 (Mar. 1973); CPM-7303E1041

Theory of Ordering in Multicomponent Solid Solutions (T)—D. A. Badalyan and A. G. Khachaturyan. 14(9), 2270–3 (Mar. 1973); CPM-7303E1094

Diffusion and Solubility of Co in GaAs (E)—G. S. Kulikov and I. N. Nikulitsa. 14(9), 2335–8 (Mar. 1973); CPM-7303E1159

Influence of the Decay of Si–Cu, Si–Ag, and Si–Au Solid Solutions on Defect Formation in Silicon (E)—T. D. Dzhafarov and T. T. Dedegkaev. 14(9), 2352–6 (Mar. 1973); CPM-7303E1176

Thermal Conductivity of $GaAs_{1-x}P_x$ Solid Solutions (E)—L. V. Gorchak, V. V. Negreskul and A. G. Cheban. 14(9), 2382–4(C) (Mar. 1973); CPM-7303E1206

Precipitation of Copper in GaAs Single Crystals (E)—L. M. Morgulis, M. G. Mil'vidskii, V. B. Osvenskii and T. G. Yugova. 14(9), 2436–8(C) (Mar. 1973); CPM-7303E1260

Investigation of the α–Al_2O_3–Fe_2O_3 System by the Mössbauer Effect (E)—A. V. Kalyamin, B. G. Lur'e, L. A. Marshak and A. N. Murin. 14(12), 3083–4(C) (Jun. 1973); CPM-7306D0925

5.30.40.60. Stoichiometry and Homogeneity

Determination of the Composition of Guinier–Preston Zones by the Method of Relative Intensities of Diffuse Effects (E/T)—V. M. Agishev and K. M. Yamaleev. 14(2), 279–82 (Aug. 1972); CPM-7208E0436

Electrical Conductivity and Thermal EMF of Finely Dispersed Reduced Rutile (TiO_2) (E)—V. N. Bogomolov and É. M. Sher. 14 (3), 567–9 (Sep. 1972); CPM-7209D0001

Magnetic Sublattices in Nonstoichiometric Manganese–Zinc Ferrites (E)—Sh. Sh. Bashkirov, A. B. Liberman and V. I. Sinyavskii. 14 (11), 2776–8 (May 1973); CPM-7305D1004

5.30.40.70. Microstructure

Microstructure of Domains and Domain Walls in Single–Crystal Films of Barium Titanate (E)—S. I. Yakunin, V. V. Shakmanov, G. V. Spivak and N. V. Vasil'eva. 14(2), 310–3 (Aug. 1972); CPM-7208E0467

Unusual Effect of Isotopic and Isomorphous Substitution in Ferroelectric Crystals of the Triglycine Sulfate Group (E)—E. V. Peshikov. 14(6), 1377–80 (Dec. 1972); CPM-7212D0713

Resistometric and Electron–Microscope Investigation of the Mechanism of Growth of Bismuth Films (E)—V. N. Vigdorovich, G. A. Ukhlinov and D. V. Yakashvili. 14(9), 2370–1(C) (Mar. 1973); CPM-7303E1194

Formation of Large–Angle Grain Boundaries Under the Influence of Mechanical Stresses (E)—Zh. I. Dranova and I. M. Mikhailovskii. 14(12), 3104–5(C) (Jun. 1973); CPM-7306D0946

5.30.40.75. Melting and Solidification

Calorimetric Study of the Recrystallization and Reorganization Processes of Crystallites of a Polymer (E)—I. V. Sochava, G. I. Tsereteli and O. I. Smirnova. 14(2), 460–6 (Aug. 1972); CPM-7208E0617

Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Klushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

5.30.40.80. Vaporization, Sublimation and Condensation

Sublimation of Cobalt in the Temperature Range Including the Curie Point (1320–1410°K) (E)—V. O. Khandros and N. A. Bogolyubov. 14(6), 1592–3(C) (Dec. 1972); CPM-7212D0928

5.30.50. Thermodynamics of Close–Packed Van der Waals Solids (e.g. He^4, H_2)

Influence of Zero Energy on the Plastic Deformation of Hydrogen (E) —Yu. E. Stetsenko, D. N. Bol'shutkin, L. A. Indan and A. A. Khudoteplaya. 14(1), 149–51 (Jul. 1972); CPM-7207D1108

Force Constants and Phonon Dispersion in Rare–Gas Crystals (T/E) —K. B. Tolpygo and E. P. Troitskaya. 14(10), 2480–3 (Apr. 1973); CPM-7304E1126

5.30.70. Thermomechanical and Thermoelastic Effects

Vacancy Equilibrium and Thermal Expansion of Tungsten at High Temperatures (E)—Ya. A. Kraftmakher. 14(2), 325–7 (Aug. 1972); CPM-7208E0482

Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

Temperature Dependence of Positron Annihilation in a Metal (T)—A. A. Vorob'ev and K. P. Aref'ev. 14(4), 906–7 (Oct. 1972); CPM-7210D0721

Anisotropic Linear Expansion and the Isothermal Compressibility of a GaSe Single Crystal (E)—N. G. Aliev, I. G. Kerimov, M. M. Kurbanov and T. A. Mamedov. 14(5), 1304–5(C) (Nov. 1972); CPM-7211A1556

Anisotropy of the Thermal Expansion of InTe (E)—Yu. A. Paukshte and L. Z. Dankus. 14(5), 1316–7(C) (Nov. 1972); CPM-7211A1568

Acoustic Emission in a Thermoelastic Martensite Reaction (E)—R. I. Mints, V. P. Melekhin, I. Yu. Ievlev and V. V. Bukhalenkov. 14 (5), 1368–9(C) (Nov. 1972); CPM-7211A1620

Effect of Singularities in the Density of Electron States on the Thermodynamics of a Normal Metal (T)—V. G. Bar'yakhtar, V. V. Gann and V. I. Makarov. 14(6), 1477–80 (Dec. 1972); CPM-7212D0813

Temperature Dependence of the Components of the Thermal Expansion Tensor α_a of Gallium (E)—E. I. Geshko, V. P. Mikhal'chenko and B. M. Sharlai. 14(6), 1554–5(C) (Dec. 1972); CPM-7212D0890

Thermal Expansion of ZnSe in the Temperature Range 100–600°K (E) —V. V. Zhdanova and V. P. Sergeev. 14(7), 1859–61(C) (Jan. 1973); CPM-7301C0819

Analysis of Thermal Expansion of Transition Metals in the Quasiharmonic Approximation (T/E)—Yu. A. Lisovskii. 14(8), 2015–8 (Feb. 1973); CPM-7302E1141

Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Thermal Expansion and Isothermal Compressibility of Indium Chalcogenide Single Crystals (E)—N. G. Aliev, I. G. Kerimov and M. M. Kurbanov. 14(12), 3106–7(C) (Jun. 1973); CPM-7306D0948

5.30.90. Other Topics in Thermodynamic Phenomena

Temperature Dependence of Infrared Dispersion of Lattice Reflection in GaSb (E/T)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(11), 2838–40 (May 1973); CPM-7305D1066

5.35. TRANSPORT PHENOMENA

5.35.10. General Theory and Measurement Techniques

Relaxation of Electrons in Dissipative Media (T)—A. P. Bozhko and K. K. Pukhov. 14(7), 1638–44 (Jan. 1973); CPM-7301C0598

5.35.20. Carrier Properties

5.35.20.10. General

Nondegenerate Semiconductors with High Conduction–Electron Concentrations (T)—V. L. Gurevich. 14(3), 584–8 (Sep. 1972); CPM-7209D0018

5.35.20.30. Concentration, Density and Distribution

Electron—Hole Drops in Germanium (E)—V. M. Asnin, A. A. Rogachev and N. I. Sablina. 14(2), 332–5 (Aug. 1972); CPM-7208E0489

Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6(C) (Aug. 1972); CPM-7208E0711

Charge Density Fluctuations in Many-Valley Semiconductors in Strong Electric Fields (T)—A. A. Chumak and V. A. Shenderovskii. 14(5), 1291–3 (Nov. 1972); CPM-7211A1543

Theory of Deformation–Concentration Instability in Semiconductors (T)—V. I. Pipa and V. N. Piskovoi. 14(8), 1979–84 (Feb. 1973); CPM-7302E1105

Influence of the Nonequilibrium Carrier Density on the Formation of Phase Boundaries in $SbSI_xBr_{1-x}$ Single Crystals (E)—I. I. Groshik, I. D. Turyanitsa and F. M. Migolinets. 14(10), 2614–5(C) (Apr. 1973); CPM-7304E1260

Longitudinal Magnetoresistance of n-Si in Strong Magnetic Fields (E/T)—M. V. Glushkov and A. I. Markin. 14(12), 2967–70 (Jun. 1973); CPM-7306D0809

Theory of Damping of Local Vibrations in Semiconductors (T)—V. F. Los'. 14(12), 3048–50 (Jun. 1973); CPM-7306D0890

5.35.20.50. Scattering, Mobility, Effective Mass and Mean Free Path

Indirect Phononless Optical Transitions in Mixed Germanium–Silicon Crystals (E/T)—V. I. Safarov and A. N. Titkov. 14(2), 380–3 (Aug. 1972); CPM-7208E0537

High–Temperature Hall Mobility in Cubic Polaron Semiconductors (T)—V. V. Bryksin and Yu. A. Firsov. 14(2), 384–6 (Aug. 1972); CPM-7208E0541

Determination of the Mean Free Path of Electrons in Metals (T)—V. P. Naberezhnykh, L. T. Tsymbal and M. S. Purchinskii. 14(2), 431–3 (Aug. 1972); CPM-7208E0588

Influence of Additions of Ag, In, and Pt on the Transport Effects in Bismuth—Antimony Alloys (E)—G. A. Ivanov, Yu. N. Saraev and V. I. Korishev. 14(2), 539–40(C) (Aug. 1972); CPM-7208E0696

Optical Properties of V_2O_3 in the Region of the Phase Transition (E/T)—M. S. Kozyreva, V. N. Novikov and B. A. Tallerchik. 14(3), 639–43 (Sep. 1972); CPM-7209D0073

Conductivity, Thermoelectric Properties, and Band Structure of Crystalline BiSeI (E/T)—D. M. Bercha and M. P. Zayachkovskii. 14(3), 766–7(C) (Sep. 1972); CPM-7209D0200

Temperature Dependences of the Electron Effective Mass and Mobility in $Bi_2Te_{3-x}Se_x$ (E/T)—B. M. Gol'tsman, V. A. Kutasov and L. N. Luk'yanova. 14(4), 868–71 (Oct. 1972); CPM-7210D0683

Temperature Dependence of Carrier Mobility in Barium Titanate (E/T)—É. V. Bursian, Ya. G. Girshberg and É. N. Starov. 14(4), 872–5 (Oct. 1972); CPM-7210D0687

Behavior of an Excitonic Insulator in a Magnetic Field (T)—Yu. V. Kopaev and I. V. Tyutin. 14(4), 960–2 (Oct. 1972); CPM-7210D0775

Charge Density Fluctuations in Many-Valley Semiconductors in Strong Electric Fields (T)—A. A. Chumak and V. A. Shenderovskii. 14(5), 1291–3 (Nov. 1972); CPM-7211A1543

Hopping Mobility in Compensated Semiconductors (T)—I. Z. Kostadinov and V. L. Pokrovskii. 14(8), 1901–5 (Feb. 1973); CPM-7302E1027

Resonance Interaction between Carriers in Polar Semiconductors (T)—Yu. I. Ravich and V. I. Tamarchenko. 14(8), 1945–9 (Feb. 1973); CPM-7302E1071

Diffusion of Electrons in a Constant Electric Field with an Exponentially Varying Mobility and Lifetime (T)—V. M. Evdokimov and Yu. L. Lisovskii. 14(8), 2089–92 (Feb. 1973); CPM-7302E1215

Scattering of Conduction Electrons by Tunneling States of Defects in Ionic Crystals (T/E)—M. F. Deigen, M. D. Glinchuk and L. A. Suslin. 14(8), 2096–9 (Feb. 1973); CPM-7302E1222

Some Electronic Properties of Heavily Doped p-Type GaAs (E)—K. P. Abdurakhmanov, B. A. Kotov, N. M. Okuneva, É. L. Plachenova and O. A. Usov. 14(9), 2234–6 (Mar. 1973); CPM-7303E1058

Transverse Acoustoelectric Effect (T/E)—Yu. P. Mukhortov, V. I. Pustovoit, I. S. Ravvin and L. A. Chernozatonskii. 14(9), 2300–4 (Mar. 1973); CPM-7303E1124

Longitudinal Magnetoresistance of n-Si in Strong Magnetic Fields (E/T)—M. V. Glushkov and A. I. Markin. 14(12), 2967–70 (Jun. 1973); CPM-7306D0809

Franz–Keldysh Effect in the Impurity Absorption Region (T/E)—Fan Ba Nyan, V. B. Stopachinskii and M. V. Fok. 14(12), 3000–3 (Jun. 1973); CPM-7306D0842

Mobility of Small Polarons in Strong Electric Fields (T)—V. V. Bryksin and Yu. A. Firsov. 14(12), 3019–27 (Jun. 1973); CPM-7306D0861

Effects of Spatial Dispersion in the Reflection Spectra of Crystals Obtained for Oblique Incidence of Light (T/E)—S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(12), 3051–6 (Jun. 1973); CPM-7306D0893

5.35.20.70. Generation, Recombination, Lifetime and Trapping

Recombination Radiation from High-Density Exciton Systems in Silicon (E)—B. M. Ashkinadze and T. Risbaev. 14(3), 596–601 (Sep. 1972); CPM-7209D0030

Recombination and Capture Probabilities in Potassium Iodide–Thallium Crystals (E)—E. F. Martynovich, I. A. Parfianovich and Yu. B. Nemirovskii. 14(4), 1061–2(C) (Oct. 1972); CPM-7210D0876

Determination of the Shapes of the Potential Wells of Traps Using the Frenkel Thermal–Field Effect (T)—N. G. Volkov and V. K. Lyapidevskii. 14(5), 1149–52 (Nov. 1972); CPM-7211A1401

Kinetics of Energy Transfer in a Crystal (T)—V. P. Sakun. 14(8), 1906–14 (Feb. 1973); CPM-7302E1032

Carrier Recombination in GaAs when Carriers are Generated in the Vicinity of the Surface (E/T)—G. P. Peka and L. G. Shepel'. 14(8), 2025–30 (Feb. 1973); CPM-7302E1151

Diffusion of Electrons in a Constant Electric Field with an Exponentially Varying Mobility and Lifetime (T)—V. M. Evdokimov and Yu. L. Lisovskii. 14(8), 2089–92 (Feb. 1973); CPM-7302E1215

Instability of Two-Band Model of Metals with Respect to Annihilation Scattering (T)—Do Chan Kat and Yu. V. Kopaev. 14(9), 2252–8 (Mar. 1973); CPM-7303E1076

Poole–Frenkel Effect in β Rhombohedral Boron (E)—A. A. Berezin, V. K. Zaitsev, M. M. Kazanin and E. N. Tkalenko. 14(9), 2445–6 (C) (Mar. 1973); CPM-7303E1269

Passage of a Space–Charge–Limited Current Pulse through a Solid in the Presence of Traps (T)—A. I. Rudenko. 14(11), 2706–9 (May 1973); CPM-7305D0934

Nonlinear Absorption of IR Radiation in Indium Antimonide (E/T)—A. M. Danishevskii, S. F. Kochegarov and V. K. Subashiev. 14 (11), 2754–8 (May 1973); CPM-7305D0982

Effect of Band Structure on the Recombination Mechanism of Condensed Charge Carriers in Germanium, Silicon, and Their Alloys (E/T)—Ya. E. Pokrovskii, K. I. Svistunova and N. V. Alkeev. 14(11), 2805–7 (May 1973); CPM-7305D1033

Impurity Recombination Radiation Excited in GaAs by Strongly Absorbed Radiation (E/T)—G. P. Peka, N. L. Dmitruk and L. G. Shepel'. 14(11), 2866–9 (May 1973); CPM-7305D1094

Inductance of Impact–Ionized Plasma in Indium Antimonide (E/T)—V. N. Dobrovol'skii and V. I. Uzhva. 14(12), 2985–7 (Jun. 1973); CPM-7306D0827

5.35.20.90. Other Topics in Carrier Properties

Role of Hopping Conductivity in Absorption and Dispersion of Hypersound in CdS (E/T)—E. M. Ganapol'skii and V. V. Tarakanov. 14(2), 404–7 (Aug. 1972); CPM-7208E0561

Use of Continuous Fractions to Determine the Carrier Energy in a Magnetic Field (T)—A. G. Prudius. 14(9), 2315–8 (Mar. 1973); CPM-7303E1139

5.35.30. Electronic Conduction in Metals and Alloys

5.35.30.10. General Theory

Interaction of the Conduction Electrons with a Magnetic Impurity in the Anderson Model (T)—B. Kozazhevski. 14(1), 190–3 (Jul. 1972); CPM-7207D1149

5.35.30.20. Electrical and Thermal Conductivity of Metals

Superconductivity of Bismuth Phases Produced at Pressures Up to 30 kbar (E)—M. A. Il'ina and E. S. Itskevich. 14(2), 328–31 (Aug. 1972); CPM-7208E0485

Determination of the Mean Free Path of Electrons in Metals (T)—V. P. Naberezhnykh, L. T. Tsymbal and M. S. Purchinskii. 14(2), 431–3 (Aug. 1972); CPM-7208E0588

Effect of Pressure on Galvanomagnetic Phenomena in Rare Earth Metals (E)—L. I. Vinokurova, E. I. Kondorskii, Kh. Rakhimova and V. Yu. Ivanov. 14(3), 613–9 (Sep. 1972); CPM-7209D0047

Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

Kinetic Properties and Electron Scattering Mechanisms of Ti, Zr, and Hf at High Temperatures (T/E)—V. E. Zinov'ev, S. I. Masharov, L. I. Chupina and P. V. Gel'd. 14(4), 902–5 (Oct. 1972); CPM-7210D0717

Magnetoresistance of Island Films of Metals on Insulators (E)—B. T. Boiko, L. S. Palatnik, V. P. Kopach and S. B. Melent'ev. 14(4), 1090–1(C) (Oct. 1972); CPM-7210D0905

Conducting State of Metals with Nonmagnetic Impurities (T)—L. A. Zil'berman and Yu. M. Ivanchenko. 14(5), 1164–8 (Nov. 1972); CPM-7211A1416

Sublimation of Cobalt in the Temperature Range Including the Curie Point (1320–1410°K) (E)—V. O. Khandros and N. A. Bogolyubov. 14(6), 1592–3(C) (Dec. 1972); CPM-7212D0928

Change in the Electrical Resistivity of Lead after Creep in the Normal and Superconducting States (E)—I. A. Gindin, V. P. Lebedev and Ya. D. Starodubov. 14(7), 1748–51 (Jan. 1973); CPM-7301C0708

Resistometric and Electron–Microscope Investigation of the Mechanism of Growth of Bismuth Films (E)—V. N. Vigdorovich, G. A. Ukhlinov and D. V. Yakashvili. 14(9), 2370–1(C) (Mar. 1973); CPM-7303E1194

High–Temperature Transport Properties of Gadolinium (E)—V. E. Zinov'ev, L. P. Gel'd, G. E. Chuprikov and K. I. Epifanova. 14(9), 2372–4(C) (Mar. 1973); CPM-7303E1196

Transport Properties of Scandium at High Temperatures (E)—V. E. Zinov'ev, L. I. Chupina and P. V. Gel'd. 14(9), 2416–8(C) (Mar. 1973); CPM-7303E1240

Magnon Thermal Conductivity of Antiferromagnetic Metals (T)—I. Ya. Korenblit and B. G. Tankhilevich. 14(10), 2588–90 (Apr. 1973); CPM-7304E1234

5.35.30.30. Electrical and Thermal Conductivity of Alloys (Including Kondo Effects)

Optical Properties of Copper–Nickel Alloys in the Visible and Ultraviolet Regions of the Spectrum (E)—I. I. Sasovskaya and M. M. Noskov. 14(4), 857–9 (Oct. 1972); CPM-7210D0672

Electrical Conductivity of Vanadium Oxide Bronzes in the Liquid and Solid States (E)—A. A. Vinogradov, A. A. Andreev and A. I. Shelykh. 14(4), 1077–9(C) (Oct. 1972); CPM-7210D0892

Magnon Thermal Conductivity of Antiferromagnetic Metals (T)—I. Ya. Korenblit and B. G. Tankhilevich. 14(10), 2588–90 (Apr. 1973); CPM-7304E1234

5.35.30.40. Magnetoelectric and Other Magnetotransport Effects

Influence of Domain Boundaries on the Conductivity of Ferromagnets (T)—Yu. I. Man'kov. 14(1), 62–4 (Jul. 1972); CPM-7207D1021

Influence of Additions of Ag, In, and Pt on the Transport Effects in Bismuth—Antimony Alloys (E)—G. A. Ivanov, Yu. N. Saraev and V. I. Korishev. 14(2), 539–40(C) (Aug. 1972); CPM-7208E0696

Effect of Pressure on Galvanomagnetic Phenomena in Rare Earth Metals (E)—L. I. Vinokurova, E. I. Kondorskii, Kh. Rakhimova and V. Yu. Ivanov. 14(3), 613–9 (Sep. 1972); CPM-7209D0047

Magnetoresistance of Gadolinium and Holmium in Strong Effective Fields (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14 (3), 655–7 (Sep. 1972); CPM-7209D0089

Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14 (4), 971–4 (Oct. 1972); CPM-7210D0786

"Rotational Hall Effect" in a Nickel Single Crystal (E)—E. P. Svirina and Yu. V. Nemchinov. 14(8), 2161–2(C) (Feb. 1973); CPM-7302E1287

Hall Effect in Gadolinium in Fields up to 46 kOe at Liquid–Helium Temperatures (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14(9), 2224–6 (Mar. 1973); CPM-7303E1048

Magnetic Nonlinearity of the Dependence of Current on Electric Field Caused by the Intrinsic Field (T/E)—L. E. Gurevich and O. A. Mezrin. 14(11), 2704–5 (May 1973); CPM-7305D0932

Influence of Pressure on the Hall Effect in Dysprosium Single Crystals (E)—L. I. Vinokurova, E. I. Kondorskii, V. Yu. Ivanov, V. M. Murav'eva and Kh. Rakhimova. 14(12), 2981–4 (Jun. 1973); CPM-7306D0823

5.35.30.50. Thermoelectric Effects

Influence of Additions of Ag, In, and Pt on the Transport Effects in Bismuth—Antimony Alloys (E)—G. A. Ivanov, Yu. N. Saraev and V. I. Korishev. 14(2), 539–40(C) (Aug. 1972); CPM-7208E0696

Special Characteristics of the Thermo–EMF of Thin Bismuth Films (E)—V. I. Burchakova, D. V. Gitsu and M. I. Kozlovskii. 14(3), 775–6(C) (Sep. 1972); CPM-7209D0209

Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14 (4), 971–4 (Oct. 1972); CPM-7210D0786

Influence of Isotopic Scattering on the Thermoelectric Power of Metals (T)—A. M. Ermolaev. 14(11), 2904(C) (May 1973); CPM-7305D1132

5.35.40. Electronic Conduction in Semiconductors and Insulators

5.35.40.10. General Theory

Theory of the Anomalous Hall Effect in Ferromagnetic Semiconductors with Strong s–d Coupling (T)—G. L. Lazarev. 14 (1), 22–6 (Jul. 1972); CPM-7207D0981

Nondegenerate Semiconductors with High Conduction–Electron Concentrations (T)—V. L. Gurevich. 14(3), 584–8 (Sep. 1972); CPM-7209D0018

Transport Properties of Semiconductors with Nonparabolic Bands Placed in Strong Electric and Magnetic Fields (T)—V. A. Pogrebnyak. 14(4), 934–41 (Oct. 1972); CPM-7210D0749

Effect of Fluctuons on the Equilibrium Properties of Semiconductors (T)—M. A. Krivoglaz. 14(7), 1801–9 (Jan. 1973); CPM-7301C0761

Conductivity of Semiconductors in Strong Electric Fields (T)—V. V. Bryksin. 14(10), 2505–9 (Apr. 1973); CPM-7304E1151

5.35.40.20. Conductivity of Elemental Semiconductors

Thermal Defects Silicon (E)—L. F. Konorova. 14(6), 1610–1(C) (Dec. 1972); CPM-7212D0946

General Theory of Transport Phenomena in a Semiconductor with a Strong Electric Field [13, 2729 (1972)] (T)—V. V. Bryksin and Yu. A. Firsov. 14(6), 1615(C) (Dec. 1972); CPM-7212D0951

Pooie–Frenkel Effect in β Rhombohedral Boron (E)—A. A. Berezin, V. K. Zaitsev, M. M. Kazanin and E. N. Tkalenko. 14(9), 2445–6 (C) (Mar. 1973); CPM-7303E1269

5.35.40.30. Conductivity of III-V and II-VI Semiconductors (Excluding Oxides)

Microwave-Induced Anisotropy of Conductivity of Semiconductors in Quantizing Magnetic Fields (T)—V. I. Ryzhii. 14(1), 27–9 (Jul. 1972); CPM-7207D0986

Effect of the Type and Concentration of Structural Point Defects on the Electrophysical Properties of Undoped Gallium Arsenide (E/T)—E. V. Solov'eva, V. V. Karataev, M. G. Mil'vidskii, V. B. Osvenskii and O. G. Stolyarov. 14(2), 441–4 (Aug. 1972); CPM-7208E0598

Nonmonotonic Conductivity Dependence of the Sound Amplification Threshold in Piezoelectric Semiconductors (E/T)—B. L. Timan, V. D. Ryzhikov and V. K. Komar'. 14(3), 668–70 (Sep. 1972); CPM-7209D0102

Some Electronic Properties of Heavily Doped p-Type GaAs (E)—K. P. Abdurakhmanov, B. A. Kotov, N. M. Okuneva, É. L. Plachenova and O. A. Usov. 14(9), 2234–6 (Mar. 1973); CPM-7303E1058

5.35.40.35. Conductivity of Oxides and Ferrites

Electrical Conductivity and Thermal EMF of Finely Dispersed Reduced Rutile (TiO_2) (E)—V. N. Bogomolov and É. M. Sher. 14 (3), 567–9 (Sep. 1972); CPM-7209D0001

Temperature Dependence of Extraordinary Hall Constant of Cu—Ni Ferrites (E)—Akhmed Abdel'gani and N. Z. Miryasov. 14(7), 1745–7 (Jan. 1973); CPM-7301C0705

5.35.40.40. Conductivity of Amorphous Semiconductors

Hopping Mobility in Compensated Semiconductors (T)—I. Z. Kostadinov and V. L. Pokrovskii. 14(8), 1901–5 (Feb. 1973); CPM-7302E1027

Frequency Dispersion of the Electrical Conductivity of Liquid Selenium and Selenium–Tellurium Alloys (E)—A. A. Andreev, A. L. Manukyan, A. B. Pevtsov and L. N. Shumilova. 14(12), 3100–1 (C) (Jun. 1973); CPM-7306D0942

5.35.40.50. Conductivity of Other Semiconductors and Insulators

Influence of Structure Defects on the Electrical Properties and Luminescence of α-SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206

Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6(C) (Aug. 1972); CPM-7208E0711

Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

Thermal Conductivity of the Me_3X_4 Chalcogenides of Rare Earth Elements (E/T)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(3), 720–4 (Sep. 1972); CPM-7209D0154

Conductivity, Thermoelectric Properties, and Band Structure of Crystalline BiSeI (E/T)—D. M. Bercha and M. P. Zayachkovskii. 14(3), 766–7(C) (Sep. 1972); CPM-7209D0200

Positive Temperature Coefficient of Resistance in Doped Lead Titanate (E)—Yu. I. Gol'tsov, O. I. Prokopalo and L. A. Belova. 14(3), 805–6(C) (Sep. 1972); CPM-7209D0239

Temperature Dependences of the Electron Effective Mass and Mobility in $Bi_2Te_{3-x}Se_x$ (E/T)—B. M. Gol'tsman, V. A. Kutasov and L. N. Luk'yanova. 14(4), 868–71 (Oct. 1972); CPM-7210D0683

Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700

Thermal Conductivity of the La_2Te_3–La_3Te_4 System (E)—I. A. Smirnov, L. S. Parfen'eva and V. M. Sergeeva. 14(4), 899–901 (Oct. 1972); CPM-7210D0714

Electrical Conductivity of Some Amorphous and Crystalline Polymers in Strong Electric Fields (E)—A. A. Shilyaev and L. G. Gindin. 14(4), 1094–5(C) (Oct. 1972); CPM-7210D0909

Alternating-Current Field Effect in Organic Semiconductors (E)—M. L. Petrova and P. N. Zanadvorov. 14(6), 1581–2(C) (Dec. 1972); CPM-7212D0917

Electrical Conduction Mechanism in the Ferroelectric Semiconductor SbSI (E)—E. S. Artobolevskaya, E. V. Chenskii, R. S. Gvozdover and V. I. Petrov. 14(8), 1935–9 (Feb. 1973); CPM-7302E1061

Current Instability in a Polymer (E)—M. I. Kheifets. 14(8), 2159–60 (C) (Feb. 1973); CPM-7302E1285

Temperature Dependence of the Absorption of Ultrasound in $LiIO_3$ Crystals (E)—A. A. Abramovich, V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov and P. L. Mitnitskii. 14(9), 2237–42 (Mar. 1973); CPM-7303E1061

Conductivity of Bleached Potassium Chloride Crystals Containing Impurity Complexes (E)—Ya. N. Pershits and V. A. Andrusich. 14 (12), 3096–7(C) (Jun. 1973); CPM-7306D0938

5.35.40.60. Nonlinear Effects and Conductivity Oscillations

Temperature Dependence of the Amplitude of the Quantum Oscillations of the Resistance of Thin Tin Films (E/T)—Yu. F. Komnik, E. I. Bukhshtab, Yu. V. Nikitin and Ch. Sulkovskii. 14(2), 543–5(C) (Aug. 1972); CPM-7208E0700

Nonmonotonic Conductivity Dependence of the Sound Amplification Threshold in Piezoelectric Semiconductors (E/T)—B. L. Timan, V. D. Ryzhikov and V. K. Komar'. 14(3), 668–70 (Sep. 1972); CPM-7209D0102

Nonanalytic Dependence of Current on Field in Narrow-Band Semiconductors (T)—V. V. Bryksin. 14(3), 684–91 (Sep. 1972); CPM-7209D0118

Feasibility of Suppression of Gunn Domains (T)—S. N. Artemenko, R. F. Kazarinov and R. A. Suris. 14(6), 1393–9 (Dec. 1972); CPM-7212D0729

Nonlinear Theory of Slow Recombination Waves (T)—V. A. Gergel', R. F. Kazarinov and R. A. Suris. 14(6), 1457–61 (Dec. 1972); CPM-7212D0793

Fluctuations of Hot Photoelectrons in Semiconductors (T)—L. Ya. Kashchenevskii and I. M. Yakover. 14(8), 1953–5 (Feb. 1973); CPM-7302E1079

Fluctuations in Many-Valley Semiconductors Due to Intervalley Transitions (T)—P. M. Tomchuk and A. A. Chumak. 14(8), 2031–4 (Feb. 1973); CPM-7302E1157

Current Instability in a Polymer (E)—M. I. Kheifets. 14(8), 2159–60 (C) (Feb. 1973); CPM-7302E1285

Breakdown in p-Type Ge Field Emitters (E)—V. G. Ivanov and T. P. Smirnova. 14(10), 2624–5(C) (Apr. 1973); CPM-7304E1270

5.35.40.65. Electrical Breakdown and Avalanches

Connection Between Electrical Breakdown and the Form of the Volt—Ampere Characteristics of the Autoemission Current From p-Ge (E)—P. G. Shlyakhtenko, R. Z. Bakhtizin and N. V. Mileshkina. 14(5), 1320–2(C) (Nov. 1972); CPM-7211A1572

Breakdown in p-Type Ge Field Emitters (E)—V. G. Ivanov and T. P. Smirnova. 14(10), 2624–5(C) (Apr. 1973); CPM-7304E1270

5.35.40.70. Magnetoelectric and Other Magnetotransport Effects

Theory of the Anomalous Hall Effect in Ferromagnetic Semiconductors with Strong s–d Coupling (T)—G. L. Lazarev. 14 (1), 22–6 (Jul. 1972); CPM-7207D0981

Galvanomagnetic and Thermomagnetic Effects in p-Type InSb (E)—P. V. Tamarin, S. S. Shalyt, I. G. Lang and S. T. Pavlov. 14(1), 47–57 (Jul. 1972); CPM-7207D1006

Influence of Domain Boundaries on the Conductivity of Ferromagnets (T)—Yu. I. Man'kov. 14(1), 62–4 (Jul. 1972); CPM-7207D1021

High-Temperature Hall Mobility in Cubic Polaron Semiconductors (T)—V. V. Bryksin and Yu. A. Firsov. 14(2), 384–6 (Aug. 1972); CPM-7208E0541

Effect of the Type and Concentration of Structural Point Defects on the Electrophysical Properties of Undoped Gallium Arsenide (E/T)—E. V. Solov'eva, V. V. Karataev, M. G. Mil'vidskii, V. B. Osvenskii and O. G. Stolyarov. 14(2), 441–4 (Aug. 1972); CPM-7208E0598

Some Features of the Valence Band of Bi_2Te_3 (E)—V. V. Sologub, A. D. Goletskaya and R. V. Parfen'ev. 14(3), 783–4(C) (Sep. 1972); CPM-7209D0217

Behavior of an Excitonic Insulator in a Magnetic Field (T)—Yu. V. Kopaev and I. V. Tyutin. 14(4), 960–2 (Oct. 1972); CPM-7210D0775

Temperature Dependence of Extraordinary Hall Constant of Cu—Ni Ferrites (E)—Akhmed Abdel'gani and N. Z. Mirvassov. 14(7), 1745–7 (Jan. 1973); CPM-7301C0705

Hopping Mobility in Compensated Semiconductors (T)—I. Z. Kostadinov and V. L. Pokrovskii. 14(8), 1901–5 (Feb. 1973); CPM-7302E1027

Quantum Oscillations of the Magnetoresistance of $Cd_xHg_{1-x}Te$ (E)—N. N. Berchenko, V. E. Krevs and M. V. Pashkovskii. 14(9), 2447–8(C) (Mar. 1973); CPM-7303E1271

Theory of the Anomalous Nernst–Ettingshausen Effect in Ferromagnetic Semiconductors (T)—G. L. Lazarev. 14(10), 2591–4 (Apr. 1973); CPM-7304E1237

Photoionization Spectra of Impurity Centers in α SiC(6H) at High Temperatures (E)—I. S. Gorban', V. P. Zavada and A. S. Skirda. 14(10), 2652–3(C) (Apr. 1973); CPM-7304E1298

Magnetic Nonlinearity of the Dependence of Current on Electric Field Caused by the Intrinsic Field (T/E)—L. E. Gurevich and O. A. Mezrin. 14(11), 2704–5 (May 1973); CPM-7305D0932

Effect of Microinhomogeneities on the Electron Absorption of Ultrasound in n–InSb (E/T)—I. L. Drichko and S. I. Kogan. 14 (11), 2856–9 (May 1973); CPM-7305D1084

Coloration of PbF_2 Crystals by Irradiation and Their Electrical Properties (E)—V. A. Arkhangel'skaya, V. G. Erofeichev and M. N. Kiseleva. 14(12), 2953–5 (Jun. 1973); CPM-7306D0795

Longitudinal Magnetoresistance of n–Si in Strong Magnetic Fields (E/T)—M. V. Glushkov and A. I. Markin. 14(12), 2967–70 (Jun. 1973); CPM-7306D0809

5.35.40.80. Thermoelectric Effects

Galvanomagnetic and Thermomagnetic Effects in p–Type InSb (E)—P. V. Tamarin, S. S. Shalyt, I. G. Lang and S. T. Pavlov. 14(1), 47–57 (Jul. 1972); CPM-7207D1006

Electrical Conductivity and Thermal EMF of Finely Dispersed Reduced Rutile (TiO_2) (E)—V. N. Bogomolov and É. M. Sher. 14 (3), 567–9 (Sep. 1972); CPM-7209D0001

Conductivity, Thermoelectric Properties, and Band Structure of Crystalline BiSeI (E/T)—D. M. Bercha and M. P. Zayachkovskii. 14(3), 766–7(C) (Sep. 1972); CPM-7209D0200

New Mechanism of Current–Stimulated Emission of Electromagnetic Waves from Crystals (T/E)—I. V. Ioffe. 14(6), 1421–3 (Dec. 1972); CPM-7212D0757

Theory of Optomagnetic Waves in Semiconductors and Semimetals (T)—I. V. Ioffe and L. F. Mezrina. 14(6), 1527–8(C) (Dec. 1972); CPM-7212D0863

Surface Ionization of Alkali–Metal Atoms on a Silicon Carbide Single Crystal (E)—L. I. Kaisheva. 14(8), 2108–9(C) (Feb. 1973); CPM-7302E1234

5.35.40.90. Other Topics in Electronic Conduction of Semiconductors and Insulators

Effect of Drift on Thermal Fluctuations of the Electromagnetic Field (T)—A. M. Konin and B. I. Shapiro. 14(8), 1966–8 (Feb. 1973); CPM-7302E1092

Effect of the Sample Boundary and Domain Walls on the Electrical Properties of Magnetic Semiconductors (T)—Yu. I. Balkarei and L. N. Bulaevskii. 14(8), 2081–4 (Feb. 1973); CPM-7302E1207

Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, É. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

5.35.50. Mixed Conductivity and Conductivity Transitions in Solids

Nonmetal–Metal Transition in $Eu_{1-x}Gd_xO$ (E)—A. A. Samokhvalov, B. A. Gizhevskii, M. I. Simonova and N. I. Solin. 14(1), 230–1(C) (Jul. 1972); CPM-7207D1189

Optical Properties of V_2O_3 in the Region of the Phase Transition (E/T)—M. S. Kozyreva, V. N. Novikov and B. A. Tallerchik. 14 (3), 639–43 (Sep. 1972); CPM-7209D0073

Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

Interband Transitions and Cyclotron Resonance of Light Holes in Strong Electric Fields (T)—E. M. Gershenzon, Yu. A. Gurvich, É. N. Gusinskii, R. I. Rabinovich and N. V. Soina. 14(6), 1493–500 (Dec. 1972); CPM-7212D0829

Heat of the Semiconductor–Metal Phase Transition in V_2O_3 (E)—V. G. Khlyustov, A. S. Borukhovich and V. A. Perelyaev. 14(7), 1848–9(C) (Jan. 1973); CPM-7301C0808

Switching Effect in Pyrolytic VO_2 Films (E)—A. G. Zhdan, A. S. Darevskii, M. E. Chugunova and I. A. Serbinov. 14(7), 1879–80 (C) (Jan. 1973); CPM-7301C0839

Semimetal–Semiconductor Transition in Bismuth under the Influence of Pressure (E)—V. A. Ventsel' and A. V. Rakhmanina. 14(9), 2325–7 (Mar. 1973); CPM-7303E1149

Features of the Phase Transition in Magnetic Semiconductors Having a Narrow Forbidden Band (T)—Yu. I. Balkarei and V. G. Baru. 14 (11), 2773–5 (May 1973); CPM-7305D1001

Spectrum of Plasma Oscillations in Semimetals (T)—Do Chan Kat and Yu. V. Kopaev. 14(12), 3012–4 (Jun. 1973); CPM-7306D0854

Thermodynamics of the Hubbard Model in the Strong–Interaction Region (T)—L. N. Bulaevskii and D. I. Khomskii. 14(12), 3015–8 (Jun. 1973); CPM-7306D0857

Switching Effect in Molten Oxides Sb_2O_3 and B_2O_3 (E)—A. A. Andreev, S. D. Zainutdinov, B. T. Melekh, T. Turgunov and E. A. Shmuratov. 14(12), 3102–3(C) (Jun. 1973); CPM-7306D0944

5.35.60. Atomic and Defect Transport

5.35.60.20. Self–Diffusion in Metals, Semimetals and Alloys

Influence of Molecule Symmetry on Random Reorientations in Solids (T)—M. M. Bil'danov, F. I. Bashirov and R. A. Dautov. 14(2), 528–9(C) (Aug. 1972); CPM-7208E0685

Investigation of the Surface Self–Diffusion of the Alloy W+Re in a Field–Emission Electron Microscope (E)—V. A. Kuznetsov. 14(8), 2135–7(C) (Feb. 1973); CPM-7302E1261

State of Nickel Atoms in a Nickel–Chromium Alloy (E)—D. F. Kalinovich, I. I. Kovenskii and M. D. Smolin. 14(12), 3098–9(C) (Jun. 1973); CPM-7306D0940

5.35.60.30. Self–Diffusion and Ionic Conduction in Nonmetals

Influence of Molecule Symmetry on Random Reorientations in Solids (T)—M. M. Bil'danov, F. I. Bashirov and R. A. Dautov. 14(2), 528–9(C) (Aug. 1972); CPM-7208E0685

Self–Diffusion of Nickel in Polycrystalline Nickel Oxide (E)—S. M. Klotsman, A. N. Timofeev and I. Sh. Trakhtenberg. 14(3), 763–5 (C) (Sep. 1972); CPM-7209D0197

Investigation of the Diffusion of Impurities in Mercury Telluride (E)—F. A. Zaitov, V. I. Stafeev and G. S. Khodakov. 14(10), 2628–9 (C) (Apr. 1973); CPM-7304E1274

5.35.60.40. Impurity and Defect Diffusion, Migration and Displacement

Equilibrium Configuration of Vacancies in Si and Ge (T)—V. A. Panteleev and V. I. Okulich. 14(2), 523–4(C) (Aug. 1972); CPM-7208E0680

Thermally Activated Motion of Twinning Boundaries in Calcite (E)—R. I. Garber, V. M. Mikhailovskii and E. I. Stepina. 14(3), 773–4 (C) (Sep. 1972); CPM-7209D0207

Diffusion Processes in Irradiated Molecular Crystals (E/T)—A. I. Mikhailov, A. I. Bol'shakov, Ya. S. Lebedev and V. I. Gol'danskii. 14(4), 1000–6 (Oct. 1972); CPM-7210D0815

Determination of the Starting Stresses of Dislocations from Etch Figure Roettes (T)—R. I. Garber and V. M. Mikhailovskii. 14(5), 1342–3(C) (Nov. 1972); CPM-7211A1594

Investigation of the Kinetics of Dislocation Motion in Silicon (E)—N. N. Novikov, N. A. Badilenko and O. P. Butchenko. 14(5), 1356–8 (C) (Nov. 1972); CPM-7211A1608

Diffusion, Electrotransport, and Solubility of Manganese Impurities in Silicon (E)—M. K. Bakhadyrkhanov, B. I. Boltaks and G. S. Kulikov. 14(6), 1441–4 (Dec. 1972); CPM-7212D0777

Influence of a Dislocation Forest on the Parameters of the Dislocation Structure of Slip Bands in LiF Crystals (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(6), 1585–7(C) (Dec. 1972); CPM-7212D0921

Operation of a Frank–Read Source in a Superconductor (T)—V. G. Bar'yakhtar, E. I. Druinskii and I. I. Fal'ko. 14(7), 1707–10 (Jan. 1973); CPM-7301C0667

Diffusion and Solubility of Helium in NaCl Crystals (E)—N. N. Alekseenko, P. V. Volobuev and P. E. Suetin. 14(8), 2073–5 (Feb. 1973); CPM-7302E1199

Influence of Space Charge on the Strength of Small-Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Doroshenko, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5(C) (Feb. 1973); CPM-7302E1230

Diffusion and Solubility of Co in GaAs (E)—G. S. Kulikov and I. N. Nikulitsa. 14(9), 2335–8 (Mar. 1973); CPM-7303E1159

Dislocation Structure of Large-Angle Metal Grain Boundaries and Metal Recrystallization (T)—I. M. Mikhailovskii. 14(10), 2475–9 (Apr. 1973); CPM-7304E1121

Investigation of the Diffusion of Impurities in Mercury Telluride (E)—F. A. Zaitov, V. I. Stafeev and G. S. Khodakov. 14(10), 2628–9 (C) (Apr. 1973); CPM-7304E1274

Acoustic Emission Associated with the Annihilation of Dislocations (T)—V. D. Natsik and K. A. Chishko. 14(11), 2678–82 (May 1973); CPM-7305D0906

Kinetics of Motion of Slip Bands in NaCl Crystals (E)—S. I. Zaitsev and É. M. Nadgornyi. 14(11), 2787–90 (May 1973); CPM-7305D1015

Nonconservative Motion of Dislocations near Grain Boundaries Which Are Sources or Sinks of Vacancies (T)—A. L. Roitburd and B. A. Vershok. 14(11), 2818–21 (May 1973); CPM-7305D1046

Mobility of Individual Dislocations in Gallium Arsenide (E)—V. B. Osvenskii and L. P. Kholodnyi. 14(11), 2822–5 (May 1973); CPM-7305D1050

Temperature Dependence of Dislocation Mobility in Gamma Irradiated (10^7 rad Dose) NaCl Crystals (E/T)—G. A. Ermakov and É. M. Nadgornyi. 14(12), 2962–6 (Jun. 1973); CPM-7306D0804

Influence of the Adsorption of Impurities on the Shape of a Diffusion Curve (E)—R. Sh. Malkovich, V. A. Mashina and I. V. Nistiryuk. 14(12), 3079–80(C) (Jun. 1973); CPM-7306D0921

Dislocation-Induced Anisotropic Absorption of Polarized Light in Cadmium Sulfide (E)—N. V. Klassen and Yu. A. Osip'yan. 14(12), 3094–5(C) (Jun. 1973); CPM-7306D0936

5.35.70. Thermal Transport in Nonmetallic Solids

Thermal Conductivity of the Me_3X_4 Chalcogenides of Rare Earth Elements (E/T)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(3), 720–4 (Sep. 1972); CPM-7209D0154

Thermal Conductivity of the La_2Te_3–La_3Te_4 System (E)—I. A. Smirnov, L. S. Parfen'eva and V. M. Sergeeva. 14(4), 899–901 (Oct. 1972); CPM-7210D0714

Heat Conductivity of Crystals of Bismuth Oxyhalides (E)—M. V. Shtilikha and D. V. Chepur. 14(5), 1354–5(C) (Nov. 1972); CPM-7211A1606

Thermal Conductivity of Ion–Radical Salts of Tetracyanoquinodimethane (E)—A. V. Petrov, Yu. G. Nurullaev, R. M. Vlasova, V. V. Kuzina and A. I. Sherle. 14(6), 1594–5(C) (Dec. 1972); CPM-7212D0930

Thermal Conductivity of Polymeric Modifications of Nd_2S_3 (E)—I. A. Smirnov, L. S. Parfen'eva, V. M. Sergeeva and T. B. Zhukova. 14(8), 2142–3(C) (Feb. 1973); CPM-7302E1268

Thermal Conductivity of $GaAs_{1-x}P_x$ Solid Solutions (E)—L. V. Gorchak, V. V. Negreskul and A. G. Cheban. 14(9), 2382–4(C) (Mar. 1973); CPM-7303E1206

Thermal Conductivity of Sm_3S_4 (E)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(9), 2412–3(C) (Mar. 1973); CPM-7303E1236

Anisotropy of the Thermal Conductivity and Thermal Diffusivity in Iron Digermanide (E)—R. P. Krentsis, K. I. Meizer and P. V. Gel'd. 14(10), 2601–2 (Apr. 1973); CPM-7304E1247

5.35.90. Other Topics in Transport Phenomena

Stark Effect and Charge-Transfer States in Organic Semiconductors (E)—L. M. Blinov and N. A. Kirichenko. 14(8), 2163–4(C) (Feb. 1973); CPM-7302E1289

5.40. DIELECTRIC AND FERROELECTRIC PHENOMENA

5.40.10. General Theory and Measurement Techniques

Theory of the Crystal Field in Dielectrics (T)—M. V. Eremin and A. A. Kornienko. 14(3), 644–8 (Sep. 1972); CPM-7209D0078

Model of the Ferroelectric Mode (T)—O. G. Bendik. 14(4), 849–56 (Oct. 1972); CPM-7210D0664

5.40.20. Dielectric Constants of Materials

New Ferroelectric : Antimony Orthoniobate (T)—A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14(2), 509–10(C) (Aug. 1972); CPM-7208E0666

Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

Magnetooptical Resonance in Manganese Ferrite in the Visible Spectral Region (E)—A. V. Malakhovskii, I. S. Édel'man and G. G. Vasil'ev. 14(3), 681–3 (Sep. 1972); CPM-7209D0115

Acoustic Investigations of Sb_2S_3 Crystals (E)—I. P. Grigas, V. F. Kunigelis, A. S. Oriyukas and V. I. Samulionis. 14(3), 796–7(C) (Sep. 1972); CPM-7209D0230

Model of the Ferroelectric Mode (T)—O. G. Bendik. 14(4), 849–56 (Oct. 1972); CPM-7210D0664

Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700

Frequency and Temperature Dependences of the Complex Dielectric Constant of Ferroelectrics near the Curie Point (T)—A. P. Levanyuk and N. V. Shchedrina. 14(4), 1027–32 (Oct. 1972); CPM-7210D0842

Influence of the Amplitude of Free Vibrations on the Permittivity of $BaTiO_3$ Single Crystals (E)—E. P. Kashchenko and A. Yu. Kudzin. 14(4), 1085–6(C) (Oct. 1972); CPM-7210D0900

Permittivity Tensor of Manganese Ferrite in the Visible Range of Wavelengths (T/E)—A. V. Malakhovskii, I. S. Édel'man and O. A. Rybinskii. 14(6), 1462–6 (Dec. 1972); CPM-7212D0798

Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

Method of Changing and Controlling Optical Properties of Photosemiconductors (T)—R. G. Maev, I. A. Poluéktov and V. I. Pustovoit. 14(7), 1738–44 (Jan. 1973); CPM-7301C0698

Anomalous Behavior of the Dielectric Nonlinearity Coefficient in Strontium Titanate near the Phase Transition at 110°K (E)—I. M. Buzin, I. V. Ivanov, E. I. Rukin and V. F. Chuprakov. 14(7), 1770–3 (Jan. 1973); CPM-7301C0730

Vacuum–Evaporated Ferroelectric Barium Titanate Thinner Than 1000 Å (E)—Yu. Ya. Tomashpol'skii and M. A. Sevost'yanov. 14(9), 2319–21 (Mar. 1973); CPM-7303E1143

Phase Transitions in Ferroelectrics Containing Hydrogen Bonds (T)—P. I. Konsin and N. N. Kristofel'. 14(10), 2484–8 (Apr. 1973); CPM-7304E1130

Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133

5.40.30. Polarization and Depolarization

Relationship between Directions of Electric and Magnetic Polarizations in Boracite and Other Crystals (T)—O. V. Kovalev. 14(1), 258–60(C) (Jul. 1972); CPM-7207D1217

Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634

Light Emission from $BaTiO_3$ Crystals Subjected to Uniaxial Stress Pulses (E)—S. A. Flerova and Yu. I. Samchenko. 14(2), 498–9(C) (Aug. 1972); CPM-7208E0655

Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Model of the Ferroelectric Mode (T)—O. G. Bendik. 14(4), 849–56 (Oct. 1972); CPM-7210D0664

Phase Transitions in Polarized Media and the Role of the Inhomogeneous State (T)—V. G. Bar'yakhtar and V. F. Klepikov. 14(5), 1267–71 (Nov. 1972); CPM-7211A1519

Piezoelectric Properties of Polarized $BaTiO_3$ Ceramics Subjected to Uniaxial Transverse Compression (E)—E. V. Sinyakov, A. I. Gavrilishina and S. A. Flerova. 14(5), 1302–3(C) (Nov. 1972); CPM-7211A1554

Local Electron States in Domain Walls of Ferroelectrics (T)—Yu. I. Balkarei. 14(6), 1583–4(C) (Dec. 1972); CPM-7212D0919

Stabilization of Spontaneous Polarization of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and T. V. Panchenko. 14(6), 1599–600(C) (Dec. 1972); CPM-7212D0935

Theory of Phase Transitions in Boracites (T)—Yu. M. Gufan and V. P. Sakhnenko. 14(7), 1660–5 (Jan. 1973); CPM-7301C0620

Electrooptical Effect in Ferroelectric Crystals Having a Smeared Phase Transition (E/T)—A. A. Berezhnoi. 14(7), 1756–60 (Jan. 1973); CPM-7301C0716

Antiparallel Switching in a–Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(7), 1844–5(C) (Jan. 1973); CPM-7301C0804

Nonlinear Optical Properties of $BaTiO_3$, $LiNbO_3$, and $LiIO_3$ Crystals in a Model of Polarizable Ions (T)—L. B. Meisner. 14(8), 1922–5 (Feb. 1973); CPM-7302E1048

Features of Lateral Motion in a–Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(8), 2057–9 (Feb. 1973); CPM-7302E1183

Barkhausen Jumps and Stabilization of the Spontaneous Polarization of Single Crystals of $BaTiO_3$ (E)—V. M. Rudyak, A. Yu. Kudzin and T. V. Panchenko. 14(8), 2112–3(C) (Feb. 1973); CPM-7302E1238

Emission of Light from $BaTiO_3$ Crystals During Phase Transitions (E)—S. A. Flerova and Yu. I. Samchenko. 14(9), 2406–7(C) (Mar. 1973); CPM-7303E1230

Optical Detection in Lithium Iodate Crystals (E)—P. N. Zanadvorov, V. M. Moldavskaya and T. D. Levitskaya. 14(9), 2424–5(C) (Mar. 1973); CPM-7303E1248

Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14(10), 2539–42 (Apr. 1973); CPM-7304E1185

Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133

Ferroelectric Phase Transition in a Ferroelectric–Ferromagnetic Material Subjected to a Magnetic Field (T)—I. E. Chupis and N. Ya. Plyushko. 14(11), 2907–8(C) (May 1973); CPM-7305D1135

Theoretical Analysis of Polarization and of Nonlinear Optical Properties of Single Crystals (T)—D. D. Karov and S. N. Koikov. 14(12), 3064–7 (Jun. 1973); CPM-7306D0906

5.40.40. Dielectric Loss and Dielectric Relaxation

Dielectric Losses in Polycrystalline Solids (T)—B. Ya. Balagurov and R. O. Zaitsev. 14(1), 41–6 (Jul. 1972); CPM-7207D1000

Influence of Dipole–Dipole Interaction on the Relaxation Properties of a Simple Model of a Dielectric (T)—P. N. Vorontsov–Vel'yaminov, A. M. El'yashevich and I. A. Favorskii. 14(3), 678–80 (Sep. 1972); CPM-7209D0112

Relaxation Phenomena in Additively Colored KBr Crystals (E)—N. G. D'yachenko, A. V. Tyurin and A. S. Sheveleva. 14(10), 2648–9 (C) (Apr. 1973); CPM-7304E1294

5.40.50. Dielectric Breakdown

Formation of Cavities During Breakdown of Ionic Crystals (E)—A. A. Vorob'ev and L. T. Murashko. 14(1), 207–8(C) (Jul. 1972); CPM-7207D1166

5.40.60. Space–Charge Effects

Temperature Dependence of the Photoconductivity Spectrum of Anthracene (E/T)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(3), 1241–4 (Nov. 1972); CPM-7211A1493

Stabilization of Spontaneous Polarization of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and T. V. Panchenko. 14(6), 1599–600(C) (Dec. 1972); CPM-7212D0935

Theory of Deformation–Concentration Instability in Semiconductors (T)—V. I. Pipa and V. N. Piskovoi. 14(8), 1979–84 (Feb. 1973); CPM-7302E1105

Passage of a Space–Charge–Limited Current Pulse through a Solid in the Presence of Traps (T)—A. I. Rudenko. 14(11), 2706–9 (May 1973); CPM-7305D0934

Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Resonant Dynamic Breakdown of Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei, V. V. Pavlovich and É. M. Épshtein. 14(11), 2799–801 (May 1973); CPM-7305D1027

Impurity Recombination Radiation Excited in GaAs by Strongly Absorbed Radiation (E/T)—G. P. Peka, N. L. Dmitruk and L. G. Shepel'. 14(11), 2866–9 (May 1973); CPM-7305D1094

5.40.80. Combined Dielectric Effects

5.40.80.10. Piezoelectricity and Electrostriction

Nonlinear Interaction of Hypersonic Waves in a $LiNbO_3$ Crystal (E)—A. V. Pugovkin and S. M. Shandarov. 14(1), 201–2(C) (Jul. 1972); CPM-7207D1160

Dependence of the Piezoeffect in Barium Titanate on the Means of Screening the Spontaneous Induction (T)—B. M. Vul, G. M. Guro and I. I. Ivanchik. 14(3), 602–7 (Sep. 1972); CPM-7209D0036

Influence of the Amplitude of Free Vibrations on the Permittivity of $BaTiO_3$ Single Crystals (E)—E. P. Kashchenko and A. Yu. Kudzin. 14(4), 1085–6(C) (Oct. 1972); CPM-7210D0900

Piezoelectric Properties of Polarized $BaTiO_3$ Ceramics Subjected to Uniaxial Transverse Compression (E)—E. V. Sinyakov, A. I. Gavrilishina and S. A. Flerova. 14(5), 1302–3(C) (Nov. 1972); CPM-7211A1554

Generation of Harmonics of Transverse Elastic Waves in Crystals (E)—V. V. Lemanov and N. K. Yushin. 14(8), 2053–6 (Feb. 1973); CPM-7302E1179

Temperature Dependence of the Absorption of Ultrasound in $LiIO_3$ Crystals (E)—A. A. Abramovich, V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov and P. L. Mitnitskii. 14(9), 2237–42 (Mar. 1973); CPM-7303E1061

Fluctuation Absorption of Sound near the Curie Points of Ferroelectrics That Become Piezoelectric in the Paraelectric Phase (T)—A. P. Levanyuk and N. V. Shchedrina. 14(10), 2581–4 (Apr. 1973); CPM-7304E1227

5.40.80.20. Pyroelectricity and Electrocaloric Effect

Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Pyroelectric Processes in Lead Monoxide (E)—V. A. Bordovskii and V. A. Izvozchikov. 14(5), 1344–5(C) (Nov. 1972); CPM-7211A1596

Surface "Pyroelectric" Effect in Insulating Films (T/E)—L. M. Blinov, S. V. Ermakov and L. M. Korolev. 14(12), 3073–4(C) (Jun. 1973); CPM-7306D0915

5.40.85. Ferroelectricity and Antiferroelectricity

5.40.85.10. General Theory and Measurement Techniques

Dependence of the Piezoeffect in Barium Titanate on the Means of Screening the Spontaneous Induction (T)—B. M. Vul, G. M. Guro and I. I. Ivanchik. 14(3), 602–7 (Sep. 1972); CPM-7209D0036

5.40.85.30. Transitions and Curie Point

Effect of Domain Structure on the Behavior of Thermodynamic Parameters near a Critical Point (T)—V. S. Esipov, V. M. Zaprudskii and M. A. Mikulinskii. 14(1), 9–13 (Jul. 1972); CPM-7207D0968

Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634

New Ferroelectric : Antimony Orthoniobate (T)—A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14 (2), 509–10(C) (Aug. 1972); CPM-7208E0666

Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Acoustic Investigations of Sb_2S_3 Crystals (E)—I. P. Grigas, V. F. Kunigelis, A. S. Orlyukas and V. I. Samulionis. 14(3), 796–7(C) (Sep. 1972); CPM-7209D0230

Structures with Exchange Interactions of the Electric and Magnetic Polarizations (T)—O. V. Kovalev. 14(4), 826–31 (Oct. 1972); CPM-7210D0641

Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700

Exciton–Phonon Displacive Phase Transitions (T)—P. I. Konsin. 14 (4), 978–80 (Oct. 1972); CPM-7210D0793

Frequency and Temperature Dependences of the Complex Dielectric Constant of Ferroelectrics near the Curie Point (T)—A. P. Levanyuk and N. V. Shchedrina. 14(4), 1027–32 (Oct. 1972); CPM-7210D0842

Phase Transitions in Polarized Media and the Role of the Inhomogeneous State (T)—V. G. Bar'yakhtar and V. F. Klepikov. 14(5), 1267–71 (Nov. 1972); CPM-7211A1519

Intrinsic Absorption and Thermal Properties of Stibiotantalite (E/T)—V. K. Novik, N. F. Karyakina and V. A. Timoshenkov. 14(5), 1288–90 (Nov. 1972); CPM-7211A1540

Unusual Effect of Isotopic and Isomorphous Substitution in Ferroelectric Crystals of the Triglycine Sulfate Group (E)—E. V. Peshikov. 14(6), 1377–80 (Dec. 1972); CPM-7212D0713

Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

Electrooptical Effect in Ferroelectric Crystals Having a Smeared Phase Transition (E/T)—A. A. Berezhnoi. 14(7), 1756–60 (Jan. 1973); CPM-7301C0716

Anomalous Behavior of the Dielectric Nonlinearity Coefficient in Strontium Titanate near the Phase Transition at 110°K (E)—I. M. Buzin, I. V. Ivanov, E. I. Rukin and V. F. Chuprakov. 14(7), 1770–3 (Jan. 1973); CPM-7301C0730

Anomalous Behavior of the Optical Absorption Coefficient of Lead Magnoniobate Single Crystals in the Region of a Broad Ferroelectric Transition (E)—L. S. Kamzina, N. N. Krainik and N. N. Nesterova. 14(7), 1853–5(C) (Jan. 1973); CPM-7301C0813

Nonlinear Effects in the Propagation of Sound in a Ferroelectric Close to the Phase Transition (E)—O. Yu. Serdobol'skaya and Kuak Tkhi Tam. 14(8), 2114–5(C) (Feb. 1973); CPM-7302E1240

Phase Transitions in Ferroelectrics Containing Hydrogen Bonds (T)—P. I. Konsin and N. N. Kristofel'. 14(10), 2484–8 (Apr. 1973); CPM-7304E1130

Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14(10), 2539–42 (Apr. 1973); CPM-7304E1185

Fluctuation Absorption of Sound near the Curie Points of Ferroelectrics That Become Piezoelectric in the Paraelectric Phase (T)—A. P. Levanyuk and N. V. Shchedrina. 14(10), 2581–4 (Apr. 1973); CPM-7304E1227

Influence of the Nonequilibrium Carrier Density on the Formation of Phase Boundaries in $SbSI_xBr_{1-x}$ Single Crystals (E)—I. I. Groshik, I. D. Turyanitsa and F. M. Migolinets. 14(10), 2614–5(C) (Apr. 1973); CPM-7304E1260

Phase Transition in Irradiated Gadolinium Molybdate (E)—V. V. Dem'yanov and M. I. Shchedrin. 14(10), 2620–1(C) (Apr. 1973); CPM-7304E1266

Relationship between the Barkhausen Effect and the State of Defects in Ferroelectric Semiconductor SbSI (E)—V. M. Rudyak, A. A. Bogomolov, V. V. Ivanov and A. I. Yanter. 14(10), 2646–7(C) (Apr. 1973); CPM-7304E1292

Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Ferroelectric Phase Transition in a Ferroelectric–Ferromagnetic Material Subjected to a Magnetic Field (T)—I. E. Chupis and N. Ya. Piyushko. 14(11), 2907–8(C) (May 1973); CPM-7305D1135

5.40.85.50. Domain Structure and Effects and Hysteresis

Nature of Dissipative Effects Which Accompany Disaccommodation-Type Phenomena in Ferrites and Ferroelectrics (T/E)—L. B. Rozenbaum. 14(1), 196–8(C) (Jul. 1972); CPM-7207D1155

Influence of Nonequilibrium Carriers on the Domain Structure of the Ferroelectric Semiconductor SbSI (E)—B. S. Agaronov, N. M. Bezdetnyi, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(1), 205–6(C) (Jul. 1972); CPM-7207D1164

New Ferroelectric : Antimony Orthoniobate (T)—A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14 (2), 509–10(C) (Aug. 1972); CPM-7208E0666

Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Influence of the Amplitude of Free Vibrations on the Permittivity of $BaTiO_3$ Single Crystals (E)—E. P. Kashchenko and A. Yu. Kudzin. 14(4), 1085–6(C) (Oct. 1972); CPM-7210D0900

Domain Structure and Local States in SbSI Type Semiconductor–Ferroelectrics (T)—D. M. Bercha, A. A. Kikineshi, D. G. Semak and D. V. Chepur. 14(5), 1359–60(C) (Nov. 1972); CPM-7211A1611

Local Electron States in Domain Walls of Ferroelectrics (T)—Yu. I. Balkarei. 14(6), 1583–4(C) (Dec. 1972); CPM-7212D0919

Observation and Properties of Ring Domains in Rare-Earth Orthoferrites (E)—A. V. Antonov, A. M. Balbashov, V. A. Baltinskii and A. Ya. Chervonenkis. 14(7), 1649–52 (Jan. 1973); CPM-7301C0609

Antiparallel Switching in a–Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(7), 1844–5(C) (Jan. 1973); CPM-7301C0804

High–Pressure Phase Transitions of the First Kind in Rochelle Salt (E)—V. P. Mylov, G. G. Leonidova and B. R. Churagulov. 14(7), 1893–4(C) (Jan. 1973); CPM-7301C0853

Photodomain Effect and Deformation in SbSI Single Crystals (E)—A. A. Grekov, R. E. Pasynkov and E. D. Rogach. 14(8), 1919–21 (Feb. 1973); CPM-7302E1045

Thermodynamic Relations for the Domain Structure of Ferroelectrics (T)—E. V. Chenskii. 14(8), 1940–4 (Feb. 1973); CPM-7302E1066

Features of Lateral Motion in a–Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(8), 2057–9 (Feb. 1973); CPM-7302E1183

Pleochroism in SbSI Associated with the Domain Structure (E)—A. Kh. Zeinally, A. M. Mamedov and Sh. M. Efendiev. 14(8), 2106–7 (C) (Feb. 1973); CPM-7302E1232

Barkhausen Jumps and Stabilization of the Spontaneous Polarization of Single Crystals of $BaTiO_3$ (E)—V. M. Rudyak, A. Yu. Kudzin and T. V. Panchenko. 14(8), 2112–3(C) (Feb. 1973); CPM-7302E1230

Influence of Domain Structure on the Internal Friction of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and E. P. Kashchenko. 14(8), 2171–2(C) (Feb. 1973); CPM-7302E1297

Vacuum–Evaporated Ferroelectric Barium Titanate Thinner Than 1000 Å (E)—Yu. Ya. Tomashpol'skii and M. A. Sevost'yanov. 14 (9), 2319–21 (Mar. 1973); CPM-7303E1143

Relationship between Illuminstion–Induced Multiple Domains in SbSI Crystals and Elements of the Hysteresis Loop (E)—V. M. Rudyak, A. A. Bogomolov and V. V. Ivanov. 14(9), 2390–2(C) (Mar. 1973); CPM-7303E1214

Relationship between the Barkhausen Effect and the State of Defects in Ferroelectric Semiconductor SbSI (E)—V. M. Rudyak, A. A. Bogomolov, V. V. Ivanov and A. I. Yanter. 14(10), 2646–7(C) (Apr. 1973); CPM-7304E1292

Observation of the Domain Structure in KDP by Low-Temperature X-Ray Photography Using a Widely Diverging Beam (E)—V. Sh. Shekhtman, L. G. Shabel'nikov, I. M. Shmyt'ko and S. Kh. Aknazarov. 14(11), 2690–3 (May 1973); CPM-7305D0918

Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133

5.40.85.90. Other Topics in Ferroelectricity

Dispersion of Elastic Waves in Ferroelectrics (T/E)—K. K. Ermilin, V. A. Krasil'nikov and V. M. Prokhorov. 14(1), 251–2(C) (Jul. 1972); CPM-7207D1210

Luminescence of Single Crystals of the Ferroelectric Semiconductor SbSI (E)—M. K. Sheinkman, N. M. Krolevets, É. A. Savchenko and L. N. Tatarenko. 14(1), 253–4(C) (Jul. 1972); CPM-7207D1212

Raman Spectra of the Ferroelectric Modification of a KH_2PO_4 (KDP) Crystal (E)—E. A. Popova. 14(7), 1678–80 (Jan. 1973); CPM-7301C0638

Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

Dispersion of Dielectric Nonlinearity in Displacement Type Ferroelectrics (T)—B. Ya. Balagurov and M. B. Geilikman. 14(8), 2044–9 (Feb. 1973); CPM-7302E1170

Ion–Lattice Relaxation and Nuclear Spin–Lattice Relaxation of Li^+ in KCl (T)—A. A. Karmazin and M. D. Glinchuk. 14(8), 2144–5(C) (Feb. 1973); CPM-7302E1270

Relationship between Illumination-Induced Multiple Domains in SbSI Crystals and Elements of the Hysteresis Loop (E)—V. M. Rudyak, A. A. Bogomolov and V. V. Ivanov. 14(9), 2390–2(C) (Mar. 1973); CPM-7303E1214

Electromechanical Hysteresis and Photodeformation Effect in SbSI Single Crystals (E)—A. A. Grekov, E. D. Rogach and L. N. Syrkin. 14(9), 2396–7(C) (Mar. 1973); CPM-7303E1220

Role of the Phonon Bottleneck in Paraelectric Relaxation (T)—V. I. Konovalov. 14(11), 2909–10(C) (May 1973); CPM-7305D1137

5.40.90. Other Topics in Dielectric and Ferroelectric Phenomena

Theory of Phase Transitions in Boracites (T)—Yu. M. Gufan and V. P. Sakhnenko. 14(7), 1660–5 (Jan. 1973); CPM-7301C0620

5.45. SUPERCONDUCTIVITY

5.45.10. General Theory of the Superconducting State

Superconductivity in a Fermi–Liquid Model of s–d Electrons (T)—S. Z. Dunin. 14(2), 559–60(C) (Aug. 1972); CPM-7208E0716

Effect of a Narrow Partly Filled Band on Superconductivity in Transition and Rare–Earth Metals (T)—A. N. Kocharyan and D. I. Khomskii. 14(8), 2093–5 (Feb. 1973); CPM-7302E1219

5.45.20. Properties of the Superconducting State

5.45.20.15. Occurrence and Existence

Exciton Mechanism for Superconductivity (T)—L. N. Bulaevskii, Yu. V. Kopaev and Yu. A. Kukharenko. 14(1), 92–4 (Jul. 1972); CPM-7207D1051

Superconductivity of Bismuth Phases Produced at Pressures Up to 30 kbar (E)—M. A. Il'ina and E. S. Itskevich. 14(2), 328–31 (Aug. 1972); CPM-7208E0485

Behavior of an Excitonic Insulator in a Magnetic Field (T)—Yu. V. Kopaev and I. V. Tyutin. 14(4), 960–2 (Oct. 1972); CPM-7210D0775

5.45.20.20. Transition Temperature, Energy Gap, Critical Field and Critical Current

Effect of Interband Interactions on the Critical Temperature of the Superconducting Transition in a Semimetal (T)—Yu. V. Kopaev and R. Kh. Timerov. 14(1), 69–75 (Jul. 1972); CPM-7207D1028

Superconductivity of Bismuth Phases Produced at Pressures Up to 30 kbar (E)—M. A. Il'ina and E. S. Itskevich. 14(2), 328–31 (Aug. 1972); CPM-7208E0485

Radiation-Induced Defects and Their Influence on the Critical Current in Superconducting Niobium (E/T)—S. I. Tsypkin. 14(3), 811–2(C) (Sep. 1972); CPM-7209D0245

Nature of Solid Solutions Based of Superconducting V_3Si (E)—Ch. V. Kopetskii, B. N. Kodess and V. A. Marchenko. 14(6), 1556–7(C) (Dec. 1972); CPM-7212D0892

Mössbauer Effect and Superconductivity of Tin under Pressure (T/E)—V. N. Panyushkin and E. N. Yakovlev. 14(6), 1579–80(C) (Dec. 1972); CPM-7212D0915

Effect of Renormalized Plasma Spectrum on the Superconductivity in Semiconductors (T)—A. A. Golub and M. K. Kolpazhiu. 14(7), 1695–8 (Jan. 1973); CPM-7301C0655

Mössbauer Effect at ^{119}Sn Impurity Atoms in Gallium in Porous Glass (E)—V. N. Bogomolov, N. A. Klushin and P. P. Seregin. 14(7), 1729–31 (Jan. 1973); CPM-7301C0689

Effect of a Narrow Partly Filled Band on Superconductivity in Transition and Rare–Earth Metals (T)—A. N. Kocharyan and D. I. Khomskii. 14(8), 2093–5 (Feb. 1973); CPM-7302E1219

Superconducting Properties of Tellurium at Pressures up to 260 kbar (E)—I. V. Berman, Zh. I. Bynzarov and Yu. P. Kurkin. 14(9), 2192–4 (Mar. 1973); CPM-7303E1016

Superconductivity of Lanthanum at Pressures up to 250 kbar (E)—O. A. Zarubina. 14(10), 2497–9 (Apr. 1973); CPM-7304E1143

Superconductivity of Films of Nitrides of Several Metals and Alloys Prepared by the Electrothermal Method (E)—Yu. M. Grigor'ev, V. F. Degtyareva, A. G. Merzhanov and A. G. Rabin'kin. 14(10), 2626–7(C) (Apr. 1973); CPM-7304E1272

5.45.20.50. Intermediate and Mixed State Effects

Stability Boundary of the Superconducting State in a Type I Superconductor (E)—A. P. Smirnov and V. N. Totubalin. 14(8), 2066–8 (Feb. 1973); CPM-7302E1192

Resistance of Thin Superconducting Films in the Dynamic Mixed State (E)—V. N. Gubankov. 14(9), 2264–6 (Mar. 1973); CPM-7303E1088

5.45.20.60. Acoustical and Thermal Properties

Absorption of Surface Acoustic Waves in Superconductors (T)—G. A. Sorokin. 14(11), 2683–5 (May 1973); CPM-7305D0911

5.45.20.70. Electrical, Magnetic and Optical Properties

Exciton Mechanism for Superconductivity (T)—L. N. Bulaevskii, Yu. V. Kopaev and Yu. A. Kukharenko. 14(1), 92–4 (Jul. 1972); CPM-7207D1051

Observation of Electron Spin Resonance in a Type–II Superconductor (E)—T. S. Al'tshuler, I. A. Garifullin and É. G. Kharakhash'yan. 14(1), 213–4(C) (Jul. 1972); CPM-7207D1172

Effect of a Strong Electromagnetic Field on the Superconducting Properties of Semiconductors (T)—V. F. Elesin and Yu. V. Kopaev. 14(3), 570–4 (Sep. 1972); CPM-7209D0004

Magnetic Characteristics of Superconducting Mercury in Chrysotile Asbestos (E)—V. N. Bogomolov and V. K. Krivosheev. 14(4), 1059–60(C) (Oct. 1972); CPM-7210D0874

Change in the Electrical Resistivity of Lead after Creep in the Normal and Superconducting States (E)—I. A. Gindin, V. P. Lebedev and Ya. D. Starodubov. 14(7), 1748–51 (Jan. 1973); CPM-7301C0708

Low–Frequency Absorption in the Mixed State of Type II Superconductors (E/T)—A. P. Smirnov and V. N. Totubalin. 14 (8), 2150–2(C) (Feb. 1973); CPM-7302E1276

Nonlinear Microwave Properties of Narrow Superconducting Films (E)—V. N. Gubankov, K. K. Likharev and N. B. Pavlov. 14(11), 2721–5 (May 1973); CPM-7305D0949

Two–Photon Absorption in Superconductors (T)—V. M. Genkin and G. M. Genkin. 14(11), 2732–6 (May 1973); CPM-7305D0960

5.45.20.80. Josephson Effect

"Intrinsic" Steps on the Current–Voltage Characteristics of Josephson Point Contacts (E)—S. I. Bondarenko, I. M. Dmitrienko and T. P. Narbut. 14(2), 295–9 (Aug. 1972); CPM-7208E0452

5.45.20.90. Other Topics in Properties of the Superconducting State

Behavior of Stress Relaxation During a Superconducting Transition (E)—V. I. Dotsenko, V. V. Pustovalov and V. S. Fomenko. 14(1), 161–4 (Jul. 1972); CPM-7207D1120

Internal Friction and Relative Value of Young's Modulus of Niobium in Normal and Superconducting States (E)—V. S. Postnikov, I. V. Zolotukhin and V. E. Miloshenko. 14(3), 809–10(C) (Sep. 1972); CPM-7209D0243

Effect of Tunnel Extraction of Excitations from a Superconductor on the Superconducting Phase Transition (T)—A. G. Aronov and V. L. Gurevich. 14(9), 2309–11 (Mar. 1973); CPM-7303E1133

Amplitude–Dependent Internal Friction in Superconducting and Normal Indium (E)—V. Ya. Platkov, L. N. Polunina and V. I. Startsev. 14(9), 2400–1(C) (Mar. 1973); CPM-7303E1224

Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

5.45.30. Effect of Different Parameters on Superconductivity

Effect of Pressure on the Superconductivity of Niobium Diselenide (E)—M. A. Il'ina, E. S. Itskevich and G. A. Kalyuzhnaya. 14(2), 428–30 (Aug. 1972); CPM-7208E0585

Effect of a Strong Electromagnetic Field on the Superconducting Properties of Semiconductors (T)—V. F. Elesin and Yu. V. Kopaev. 14(3), 570–4 (Sep. 1972); CPM-7209D0004

Operation of a Frank–Read Source in a Superconductor (T)—V. G. Bar'yakhtar, E. I. Druinskii and I. I. Fal'ko. 14(7), 1707–10 (Jan. 1973); CPM-7301C0667

Nonlinear Microwave Properties of Narrow Superconducting Films (E)—V. N. Gubankov, K. K. Likharev and N. B. Pavlov. 14(11), 2721–5 (May 1973); CPM-7305D0949

5.45.40. Superconducting Materials

Observation of Electron Spin Resonance in a Type–II Superconductor (E)—T. S. Al'tshuler, I. A. Garifullin and É. G. Kharakhash'yan. 14(1), 213–4(C) (Jul. 1972); CPM-7207D1172

Nature of Solid Solutions Based of Superconducting V_3Si (E)—Ch. V. Kopetskii, B. N. Kodess and V. A. Marchenko. 14(6), 1556–7(C) (Dec. 1972); CPM-7212D0892

Stability Boundary of the Superconducting State in a Type I Superconductor (E)—A. P. Smirnov and V. N. Totubalin. 14(8), 2066–8 (Feb. 1973); CPM-7302E1192

Low–Frequency Absorption in the Mixed State of Type II Superconductors (E/T)—A. P. Smirnov and V. N. Totubalin. 14(8), 2150–2(C) (Feb. 1973); CPM-7302E1276

5.50. MAGNETIC PROPERTIES OF SOLIDS

5.50.10. General Theory and Measurement Techniques

"Magnetic Anomalies" in the Mössbauer Effect (T)—V. M. Belova and V. I. Nikolaev. 14(1), 111–6 (Jul. 1972); CPM-7207D1070

5.50.20. Diamagnetism and Paramagnetism of Nonmetals

Effective Magnetic Fields at Sn^{119} Nuclei in Some Magnetically Ordered Perovskites (E)—V. A. Bokov, G. V. Popov, N. N. Parfenova and G. G. Yushina. 14(1), 83–6 (Jul. 1972); CPM-7207D1042

Exchange Broadening of the Hyperfine Components of the ESR Spectrum of Nitrogen in Diamond (E/T)—L. A. Shul'man and G. A. Podzyarei. 14(6), 1521–6 (Dec. 1972); CPM-7212D0857

Investigation of the Structure and Magnetic Properties of $KNiPO_4$ Single Crystals (E)—A. G. Tutov, S. A. Kizhaev and M. K. Chizhov. 14(6), 1603–4(C) (Dec. 1972); CPM-7212D0939

5.50.30. Diamagnetism and Paramagnetism of Metals

Effect of Spin–Lattice Relaxation and Ultrasound on the Perturbed γ–γ Angular Correlation in Paramagnets (E)—G. A. Denisenko and E. P. Khaimovich. 14(1), 106–10 (Jul. 1972); CPM-7207D1065

Interaction of the Conduction Electrons with a Magnetic Impurity in the Anderson Model (T)—B. Kozarzhevskii. 14(1), 190–3 (Jul. 1972); CPM-7207D1149

Effect of Sn and Te Impurity on the Magnetic Susceptibility of $Bi_{88}Sb_{12}$ Alloy (E)—V. I. Korishev, G. A. Ivanov and V. L. Naletov. 14(2), 500–1(C) (Aug. 1972); CPM-7208E0657

Influence of Additions of Ag, In, and Pt on the Transport Effects in Bismuth—Antimony Alloys (E)—G. A. Ivanov, Yu. N. Saraev and V. I. Korishev. 14(2), 539–40(C) (Aug. 1972); CPM-7208E0696

Shape of the Cross Relaxation Curve (T)—V. A. Skrebnev. 14(8), 1993–5 (Feb. 1973); CPM-7302E1119

5.50.40. Bulk Homogeneous Ferro–, Ferri–, and Antiferromagnetism

5.50.40.15. Heisenberg Model

Magnon Density of States in Canted Antiferromagnets with Substitutional Impurities (T)—I. E. Dikshtein and V. V. Tarasenko. 14(5), 1221–4 (Nov. 1972); CPM-7211A1473

Localized States of Spin Systems with Two–Dimensional Defects (T)—V. I. Khokhlov. 14(6), 1577–8(C) (Dec. 1972); CPM-7212D0913

5.50.40.20. Band and Itinerant Models

Theory of the Anomalous Hall Effect in Ferromagnetic Semiconductors with Strong s–d Coupling (T)—G. L. Lazarev. 14(1), 22–6 (Jul. 1972); CPM-7207D0981

Indirect Exchange in Metals in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei and É. M. Épshtein. 14(1), 65–8 (Jul. 1972); CPM-7207D1024

Collective Spin Excitations in Narrow Bands (T)—K. A. Kikoin. 14(5), 1143–8 (Nov. 1972); CPM-7211A1395

Thermodynamics of the Hubbard Model in the Strong–Interaction Region (T)—L. N. Bulaevskii and D. I. Khomskii. 14(12), 3015–8 (Jun. 1973); CPM-7306D0857

5.50.40.30. Ising Models

Phase Diagram of the Three–Dimensional Ising Model Involving the Interaction of First and Second Neighbors (T)—P. N. Vorontsov–Vel'yaminov, N. B. Gromova and I. A. Favorskii. 14(2), 490–2(C) (Aug. 1972); CPM-7208E0647

Phonon Polarization Operator in the Ising Model (T)—V. N. Kashcheev. 14(4), 942–51 (Oct. 1972); CPM-7210D0757

5.50.40.40. Spin Waves

Indirect Exchange in Metals in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei and É. M. Épshtein. 14(1), 65–8 (Jul. 1972); CPM-7207D1024

Scattering of Electrons and Neutrons by Coupled Helicon—Magnon Waves (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(2), 387–90 (Aug. 1972); CPM-7208E0544

Non–Heisenberg Exchange Interaction and Effects Due to this Interaction (T)—V. M. Matveev and E. L. Nagaev. 14(2), 408–15 (Aug. 1972); CPM-7208E0565

Coupled Spin Waves and the Magnon—Magnon Resonance in Antiferromagnets (T)—V. A. Popov and V. I. Skidanenko. 14(2), 421–7 (Aug. 1972); CPM-7208E0578

Spin–Wave Spectrum in Films Having a Band Periodic Domain Structure (T)—N. M. Salanskii and M. Sh. Erukhimov. 14(2), 511–3(C) (Aug. 1972); CPM-7208E0668

Spin–Wave Resonance in Thin Single–Crystal Films of Manganese Ferrite (E)—B. D. Ivanov, B. A. Kalinikos, O. A. Rybinskii and D. N. Chartorizhskii. 14(2), 561–2(C) (Aug. 1972); CPM-7208E0718

Transient Behavior of a System of Parametrically Excited Spin Waves (T)—V. E. Zakharov, V. S. L'vov and S. L. Musher. 14(3), 710–5 (Sep. 1972); CPM-7209D0144

Spin Waves in Anisotropic Antiferromagnets (T)—B. P. Toperverg. 14 (4), 931–3 (Oct. 1972); CPM-7210D0746

Phonon Polarization Operator in the Ising Model (T)—V. N. Kashcheev. 14(4), 942–51 (Oct. 1972); CPM-7210D0757

Coupled Electromagnetic–Magnon Waves and Scattering of Particles in Antiferromagnetic Metals (T)—E. M. Chudnovskii. 14(4), 1035–9 (Oct. 1972); CPM-7210D0850

Theory of the Propagation of Spin Waves in Ferrites in an Inhomogeneous Static Magnetic Field (T)—I. A. Deryugin and M. G. Lysenko. 14(5), 1117–21 (Nov. 1972); CPM-7211A1369

Collective Spin Excitations in Narrow Bands (T)—K. A. Kikoin. 14 (5), 1143–8 (Nov. 1972); CPM-7211A1395

Magnon Density of States in Canted Antiferromagnets with Substitutional Impurities (T)—I. E. Dikshtein and V. V. Tarasenko. 14(5), 1221–4 (Nov. 1972); CPM-7211A1473

Effect of a Magnetic Field on the Intensity of Exchange–Dipole Transitions (T/E)—V. V. Druzhinin and V. V. Teimurazyan. 14(6), 1381–4 (Dec. 1972); CPM-7212D0717

Influence of an External Field Thermal Hysteresis of the Magnetic Structure of Chromium (E)—V. S. Golovkin, V. N. Bykov and V. A. Levdik. 14(6), 1533–4(C) (Dec. 1972); CPM-7212D0869

Localized States of Spin Systems with Two–Dimensional Defects (T) —V. I. Khokhlov. 14(6), 1577–8(C) (Dec. 1972); CPM-7212D0913

Calculation of the High–Temperature Dependence of Single–Ion Anisotropy Constants (T)—A. A. Kazakov and V. A. Rozhkina. 14 (7), 1666–8 (Jan. 1973); CPM-7301C0626

Fluctuations and Scattering of Slow Neutrons by Collective Excitations of the Electron Fermi Liquid in Metals (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(7), 1761–5 (Jan. 1973); CPM-7301C0721

Effect of Boundary Conditions on the Distribution of Spins near the Surface of a Ferromagnet (T/E)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1791–3 (Jan. 1973); CPM-7301C0751

Spin–Wave Resonance Spectrum in a Thin Ferromagnetic Layer with Mixed Boundary Conditions (T)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1826–7(C) (Jan. 1973); CPM-7301C0786

Interaction of Transverse Elastic Waves with Spin Waves in the Uniaxial Ferromagnet $RbNiF_3$ (E/T)—A. N. Grishmanovskii, V. V. Lemanov, G. A. Smolenskii and P. P. Syrnikov. 14(8), 2050–2 (Feb. 1973); CPM-7302E1176

Influence of Intense Laser Radiation on Instability Threshold of Spin Waves Excited by Parallel Pumping (E)—V. N. Agartanov, V. B. Antipov, V. V. Kolpakov and E. M. Fedorin. 14(8), 2116–7(C) (Feb. 1973); CPM-7302E1242

Broadening of a Ferromagnetic Resonance Line by Chemical Magnetic Inhomogeneities (E)—A. A. Manuilova, V. E. Zuev, S. P. Stanishevskaya and V. Ya. Dubossarskaya. 14(9), 2365–6(C) (Mar. 1973); CPM-7303E1189

Instability of Uniform Oscillations of the Magnetic Moment of a Ferromagnet (T)—V. G. Bar'yakhtar, B. A. Ivanov and A. G. Kvirikadze. 14(9), 2385–6(C) (Mar. 1973); CPM-7303E1209

Quantum Theory of an Isotropic Two–Sublattice Ferrimagnet in Applied Magnetic Fields (T)—D. A. Yablonskii. 14(10), 2468–74 (Apr. 1973); CPM-7304E1114

Parametric Excitation of Spin Waves in Ferromagnets with Magnetic Inhomogeneities (T)—V. E. Zakharov and V. S. L'vov. 14(10), 2513–9 (Apr. 1973); CPM-7304E1159

Magnon Thermal Conductivity of Antiferromagnetic Metals (T)—I. Ya. Korenblit and B. G. Tankhilevich. 14(10), 2588–90 (Apr. 1973); CPM-7304E1234

Self–Interaction of Finite–Amplitude Magnetoelastic Waves (E)—Dao Tkhu Nguyen, V. A. Krasil'nikov, S. B. Samorukov and V. I. Uchastkin. 14(10), 2632–3(C) (Apr. 1973); CPM-7304E1278

Propagation of Electromagnetic Waves in Ferromagnetic Metals with p–Type Conductivity (T)—L. M. Gorenko and R. G. Khlebopros. 14(11), 2694–5 (May 1973); CPM-7305D0922

Far–Infrared Absorption Spectrum of Antiferromagnetic Nickel Tungstate (E)—V. I. Kut'ko, V. M. Naumenko and A. I. Zvyagin. 14(11), 2900–1(C) (May 1973); CPM-7305D1128

Three–Magnon Splitting in Ferrites (E)—G. A. Melkov and V. L. Grankin. 14(11), 2916(C) (May 1973); CPM-7305D1144

Low–Temperature Absorption of Ultrasound in Ferromagnetic Insulators with Weak Anisotropy (T)—T. E. Rodkina and V. M. Tsukernik. 14(12), 2956–8 (Jun. 1973); CPM-7306D0798

5.50.40.50. Exchange and Superexchange Interactions

Non–Heisenberg Exchange Interaction and Effects Due to this Interaction (T)—V. M. Matveev and E. L. Nagaev. 14(2), 408–15 (Aug. 1972); CPM-7208E0565

Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

Structures with Exchange Interactions of the Electric and Magnetic Polarizations (T)—O. V. Kovalev. 14(4), 826–31 (Oct. 1972); CPM-7210D0641

Effect of Magnetic Ordering on the Formation of the Optical Absorption Spectrum of Yttrium Iron Garnet (E/T)—A. V. Antonov and A. I. Belyaeva. 14(4), 876–80 (Oct. 1972); CPM-7210D0691

Distinguishing Features of Magnetic Properties of Single–Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1558

Effect of a Magnetic Field on the Intensity of Exchange–Dipole Transitions (T/E)—V. V. Druzhinin and V. V. Teimurazyan. 14(6), 1381–4 (Dec. 1972); CPM-7212D0717

Magnetic Structure and Temperature Dependences of Resonance Fields of Indium–Substituted M–Type Ferrites (E)—Yu. A. Mamalui, A. A. Murakhovskii and A. A. Taran. 14(7), 1703–6 (Jan. 1973); CPM-7301C0663

Exchange Narrowing of Paramagnetic Resonance Line in Chromium Chalcogenide Spinels (E)—A. A. Samokhvalov, V. S. Babushkin, M. I. Simonova and T. I. Arbuzova. 14(7), 1883–4(C) (Jan. 1973); CPM-7301C0843

Magnetic Field Dependence of the Velocity of Sound in Ferromagnets and Antiferromagnets (T/E)—V. I. Shcheglov. 14(7), 1889–90(C) (Jan. 1973); CPM-7301C0849

Magnetic Interactions in Rare–Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2198–203 (Mar. 1973); CPM-7303E1022

NMR Investigation of Electron Ordering in Magnetite (E)—N. M. Kovtun, E. E. Solov'ev and A. A. Shemyakov. 14(9), 2430–1(C) (Mar. 1973); CPM-7303E1254

Quantum Theory of an Isotropic Two–Sublattice Ferrimagnet in Applied Magnetic Fields (T)—D. A. Yablonskii. 14(10), 2468–74 (Apr. 1973); CPM-7304E1114

Features of the Phase Transition in Magnetic Semiconductors Having a Narrow Forbidden Band (T)—Yu. I. Balkarei and V. G. Baru. 14 (11), 2773–5 (May 1973); CPM-7305D1001

Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14(11), 2835–7 (May 1973); CPM-7305D1063

5.50.40.60. Magnetic Impurity Interactions, Including Kondo Effect

Properties of a Magnetic Impurity Atom Located between Magnetic Sublattices in Antiferromagnets (T)—M. A. Ivanov. 14(2), 467–74 (Aug. 1972); CPM-7208E0624

Curie Point for Inclusions of Nickel in Synthetic Diamonds (E)—V. L. Sedov and R. A. Alikhanov. 14(4), 997–9 (Oct. 1972); CPM-7210D0812

Magnon Density of States in Canted Antiferromagnets with Substitutional Impurities (T)—I. E. Dikshtein and V. V. Tarasenko. 14(5), 1221–4 (Nov. 1972); CPM-7211A1473

Lifting of Degeneracy of the $^4E_{1g}$ Level of Mn^{3+} Ions in Cubic Antiferromagnetic Insulators in a Static Magnetic Field (T)—É. G. Petrov and V. N. Kharkyanen. 14(6), 1560–1(C) (Dec. 1972); CPM-7212D0896

Temperature Dependences of the Widths of the FMR and ESR Lines and of the g Factor of Yttrium Iron Garnet (E)—S. A. Mnatsakanyan and A. O. Marikyan. 14(6), 1575–6(C) (Dec. 1972); CPM-7212D0911

Impurity Atoms of Sn^{119} in the Helicoidal Antiferromagnet Au_2Mn (E)—N. N. Delyagin, E. N. Kornienko and V. I. Nesterov. 14(6), 1590–1(C) (Dec. 1972); CPM-7212D0926

Shape of the Cross Relaxation Curve (T)—V. A. Skrebnev. 14(8), 1993–5 (Feb. 1973); CPM-7302E1119

Broadening of a Ferromagnetic Resonance Line by Chemical Magnetic Inhomogeneities (E)—A. A. Manuilova, V. E. Znev, S. P. Stanishevskaya and V. Ya. Dubossarskaya. 14(9), 2365–6(C) (Mar. 1973); CPM-7303E1189

5.50.40.65. Magnetic Structures

Canted Antiferromagnetism and the Magnetization Curve of Conducting Antiferromagnets (T)—É. L. Nagaev. 14(3), 658–63 (Sep. 1972); CPM-7209D0092

Effective Magnetic Fields at the Diamagnetic Tin Atoms in $MnSn_2$ (E)—V. A. Golovnia, S. B. Zezin and R. N. Kuz'min. 14(5), 1313–5(C) (Nov. 1972); CPM-7211A1565

Influence of an External Field Thermal Hysteresis of the Magnetic Structure of Chromium (E)—V. S. Golovkin, V. N. Bykov and V. A. Levdik. 14(6), 1533–4(C) (Dec. 1972); CPM-7212D0869

Magnetic Structure and Temperature Dependences of Resonance Fields of Indium–Substituted M-Type Ferrites (E)—Yu. A. Mamalui, A. A. Murakhovskii and A. A. Taran. 14(7), 1703–6 (Jan. 1973); CPM-7301C0663

Magnetic Structure of Small Weakly Nonspherical Ferromagnetic Particles (T)—A. M. Afanas'ev, É. A. Manykin and É. V. Onishchenko. 14(9), 2175–80 (Mar. 1973); CPM-7303E0999

Magnetic Structure of the Garnet Andradite (E)—V. P. Plakhtii and I. V. Golosovskii. 14(9), 2387–9(C) (Mar. 1973); CPM-7303E1211

Magnetic Sublattices in Nonstoichiometric Manganese–Zinc Ferrites (E)—Sh. Sh. Bashkirov, A. B. Liberman and V. I. Sinyavskii. 14 (11), 2776–8 (May 1973); CPM-7305D1004

5.50.40.70. Magnetic Ordering, Saturation Moments and Magnetic Susceptibility

Nuclear Magnetic Resonance and Weak Ferromagnetism in $FeBO_3$ (E)—M. P. Petrov, G. A. Smolenskii, A. P. Paugurt, S. A. Kizhaev and M. K. Chizhov. 14(1), 87–91 (Jul. 1972); CPM-7207D1046

Magnetic and Magnetoelastic Properties of $FeBO_3$ Single Crystals (E) —A. M. Kadomtseva, R. Z. Levitin, Yu. F. Popov, V. N. Seleznev and V. V. Uskov. 14(1), 172–4 (Jul. 1972); CPM-7207D1131

Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Ledneva, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158

Relationship between Directions of Electric and Magnetic Polarizations in Boracite and Other Crystals (T)—O. V. Kovalev. 14(1), 258–60(C) (Jul. 1972); CPM-7207D1217

Effect of Number of Fe^{3+} Exchange Linkages on Local Magnetic Fields at Fe^{57} Nuclei in the System $YFe_{1-x}Al_xO_3$ (E/T)—V. F. Belov, T. A. Khimich, M. N. Shipko and M. I. Dakhis. 14(2), 437–40 (Aug. 1972); CPM-7208E0594

Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

Dependence of High–Field Susceptibility of Iron–Nickel Alloys on Concentration (E)—V. E. Rode and I. B. Krynetskaya. 14(2), 533–4(C) (Aug. 1972); CPM-7208E0690

Canted Antiferromagnetism and the Magnetization Curve of Conducting Antiferromagnets (T)—É. L. Nagaev. 14(3), 658–63 (Sep. 1972); CPM-7209D0092

Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

Prequency and Temperature Dependences of the Magnetic Permeability of Cobalt–Zinc Ferrites (E)—S. A. Poltinnikov. 14(6), 1400–3 (Dec. 1972); CPM-7212D0736

Magnetic Properties of $Mn_{1-x}Ni_xB_4$ in Strong Magnetic Fields (E)—V. I. Timoshchuk and I. G. Fakidov. 14(6), 1424–7 (Dec. 1972); CPM-7212D0760

Permittivity Tensor of Manganese Ferrite in the Visible Range of Wavelengths (T/E)—A. V. Malakhovskii, I. S. Édel'man and O. A. Rybinskii. 14(6), 1462–6 (Dec. 1972); CPM-7212D0798

Magnetic Susceptibility of Holmium Near the Néel Point (E)—L. A. Boyarskii and M. A. Starikov. 14(6), 1588–9(C) (Dec. 1972); CPM-7212D0924

Effect of Fluctuons on the Equilibrium Properties of Semiconductors (T)—M. A. Krivoglaz. 14(7), 1801–9 (Jan. 1973); CPM-7301C0761

Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Magnetic Structure of Small Weakly Nonspherical Ferromagnetic Particles (T)—A. M. Afanas'ev, É. A. Manykin and É. V. Onishchenko. 14(9), 2175–80 (Mar. 1973); CPM-7303E0999

Perpendicular Anisotropy of Electrolytic Cobalt Films Having Different Texture Perfections about the [0001] Axis (E)—S. A. Armyanov. 14(9), 2277–9 (Mar. 1973); CPM-7303E1101

Parameters of the Crystal Field in Rare–Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2363–4(C) (Mar. 1973); CPM-7303E1187

Instability of Uniform Oscillations of the Magnetic Moment of a Ferromagnet (T)—V. G. Bar'yakhtar, B. A. Ivanov and A. G. Kvirikadze. 14(9), 2385–6(C) (Mar. 1973); CPM-7303E1209

Magnetic Structure of the Garnet Andradite (E)—V. P. Plakhtii and I. V. Golosovskii. 14(9), 2387–9(C) (Mar. 1973); CPM-7303E1211

Magnetic Properties of Small Nickel Aerosol Particles in the 4.2–300°K Range (E/T)—A. E. Petrov, V. I. Petinov and V. V. Shevchenko. 14(10), 2595–8 (Apr. 1973); CPM-7304E1241

Magnetization of $Y_3Fe_5O_{12}$ near the Curie Point (E)—A. I. Okorokov and Ya. A. Kasman. 14(10), 2622–3(C) (Apr. 1973); CPM-7304E1268

Initial Permeability of Magnetite in the Region of the Low–Temperature Phase Transition (E)—Yu. D. Tropin and A. A. Lepishev. 14(10), 2654–5(C) (Apr. 1973); CPM-7304E1300

Two–Dimensional Magnetic Ordering in $BaMnF_4$ (E)—R. V. Zorin, B. I. Al'shin, D. N. Astrov and A. V. Tishchenko. 14(10), 2661–2(C) (Apr. 1973); CPM-7304E1307

Selective Transparency of Ferromagnetic Metal Plates near Antiresonance (T)—M. I. Kaganov and A. S. Mikhailov. 14(11), 2748–50 (May 1973); CPM-7305D0976

Magnetic and Magnetostrictive Properties of the Ferrite $CuCr_2O_4$ (E) —K. P. Belov, A. N. Goryaga, L. G. Antoshina and Yu. F. Popov. 14(12), 3071–2(C) (Jun. 1973); CPM-7306D0913

5.50.40.75. Anisotropy Effects

Optical Anisotropy and Cylindrical Domains in $(Gd,Tb,Eu)_3FeO_{12}$ Ferrite Garnets (E)—R. V. Pisarev, N. N. Kolpakova, Yu. M. Yakovlev, V. S. Filonich and A. G. Titova. 14 (2), 300–2 (Aug. 1972); CPM-7208E0457

Anisotropy of the Spin Wave Excitation Threshold (T)—P. I. Nabokin and V. G. Shavrov. 14(2), 434–6 (Aug. 1972); CPM-7208E0591

Radiation from Magnets during First–Order Phase Transformations (T)—B. A. Ivanov and A. G. Kvirikadze. 14(3), 592–5 (Sep. 1972); CPM-7209D0026

Natural Ferromagnetic Resonance in the Garnets $Y_3Fe_{5-x}Al_xO_{12}$ (E/T) —S. A. Poltinnikov, V. P. Polyakov, O. B. Proskuryakov, V. K. Pukhova and V. M. Yudin. 14(3), 777–8(C) (Sep. 1972); CPM-7209D0211

Nuclear–Gamma–Resonance Study of the Magnetic Anisotropy of Yttrium Iron Garnet (E/T)—G. N. Belozerskii, Yu. P. Khimich and Yu. M. Yakovlev. 14(4), 993–6 (Oct. 1972); CPM-7210D0808

Dependence of the Magnetic Anisotrophy of Yttrium Iron Garnet on Pressure and Temperature (E/T)—Yu. A. Timofeev, E. N. Yakovlev and A. N. Ageev. 14(5), 1131–5 (Nov. 1972); CPM-7211A1383

Anomalies in the Coercive Force in the Compensation Temperature Region in Ferrite Spinels (E)—K. P. Belov, A. N. Goryaga and T. Ya. Gridasova. 14(5), 1225–7 (Nov. 1972); CPM-7211A1477

Method for Separating Different Components of the Ferrimagnetic Anisotropy (T)—R. Z. Levitin and A. S. Pakhomov. 14(5), 1276–9 (Nov. 1972); CPM-7211A1528

Magnetostriction of Cerium–Substituted Yttrium Iron Garnets (E)—K. P. Belov, N. V. Volkova, V. I. Raitsis and A. Ya. Chervonenkis. 14 (6), 1607–9(C) (Dec. 1972); CPM-7212D0943

Calculation of the High–Temperature Dependence of Single–Ion Anisotropy Constants (T)—A. A. Kazakov and V. A. Rozhkina. 14 (7), 1666–8 (Jan. 1973); CPM-7301C0626

Effect of Boundary Conditions on the Distribution of Spins near the Surface of a Ferromagnet (T/E)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1791–3 (Jan. 1973); CPM-7301C0751

Spin–Wave Resonance Spectrum in a Thin Ferromagnetic Layer with Mixed Boundary Conditions (T)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1826–7(C) (Jan. 1973); CPM-7301C0786

Nuclear Magnetic Resonance in Ferroxplan Ferrites (E/T)—A. V. Kunevich, M. P. Petrov and B. N. Ermakov. 14(8), 2131–2(C) (Feb. 1973); CPM-7302E1257

Magnetic Interactions in Rare-Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2198–203 (Mar. 1973); CPM-7303E1022

Perpendicular Anisotropy of Electrolytic Cobalt Films Having Different Texture Perfections about the [0001] Axis (E)—S. A. Armyanov. 14(9), 2277–9 (Mar. 1973); CPM-7303E1101

Anisotropy of the Magnetoelastic Instability in Crystals (T)—V. D. Burkov and A. V. Vashkovskii. 14(10), 2489–92 (Apr. 1973); CPM-7304E1135

Low-Temperature Anisotropy Constants of Antiferromagnets (T)—V. G. Morozov. 14(10), 2630–1(C) (Apr. 1973); CPM-7304E1276

Influence of Induced Anisotropy on Ferromagnetic Resonance Curves of Fe–Si Alloys (E)—O. I. Shiryaeva, I. E. Startseva and Ya. S. Shur. 14(11), 2779–80 (May 1973); CPM-7305D1007

Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14(11), 2835–7 (May 1973); CPM-7305D1063

Magnetic Anisotropy in Basal Plane of Hematite (E)—A. A. Bogdanov. 14(11), 2845–8 (May 1973); CPM-7305D1073

Low-Temperature Absorption of Ultrasound in Ferromagnetic Insulators with Weak Anisotropy (T)—T. E. Rodkina and V. M. Tsukernik. 14(12), 2956–8 (Jun. 1973); CPM-7306D0798

5.50.40.80. Domain Structure

Effect of Domain Structure on the Behavior of Thermodynamic Parameters near a Critical Point (T)—V. S. Esipov, V. M. Zaprudskii and M. A. Mikulinskii. 14(1), 9–13 (Jul. 1972); CPM-7207D0968

Ferromagnetic Resonance in Unsaturated Crystals of Magnetoplumbite (E)—M. A. Sigal and V. P. Cherevko. 14(1), 30–6 (Jul. 1972); CPM-7207D0989

Spin-Wave Spectrum in Films Having a Band Periodic Domain Structure (T)—N. M. Salanskii and M. Sh. Erukhimov. 14(2), 511–3(C) (Aug. 1972); CPM-7208E0668

Theory of Intermediate States in Antiferromagnets (T)—V. G. Bar'yakhtar, V. F. Klepikov, V. A. Popov and E. P. Stefanovskii. 14(4), 955–9 (Oct. 1972); CPM-7210D0770

Magnetoelastic Attenuation in Nickel at High Ultrasonic Frequencies (E/T)—S. B. Grigor'ev and L. K. Kudryashova. 14(7), 1726–8 (Jan. 1973); CPM-7301C0686

Domain Structure of Orthoferrites near the Spin Reorientation Temperature and Its Effect on the Phase Transition (E/T)—A. K. Zvezdin and S. G. Kalenkov. 14(10), 2458–61 (Apr. 1973); CPM-7304E1104

Influence of Induced Anisotropy on Ferromagnetic Resonance Curves of Fe–Si Alloys (E)—O. I. Shiryaeva, I. E. Startseva and Ya. S. Shur. 14(11), 2779–80 (May 1973); CPM-7305D1007

Magnetic Anisotropy in Basal Plane of Hematite (E)—A. A. Bogdanov. 14(11), 2845–8 (May 1973); CPM-7305D1073

5.50.40.85. Domain Effects, Aftereffect and Hysteresis

Influence of Domain Boundaries on the Conductivity of Ferromagnets (T)—Yu. I. Man'kov. 14(1), 62–4 (Jul. 1972); CPM-7207D1021

Nature of Dissipative Effects Which Accompany Disaccommodation-Type Phenomena in Ferrites and Ferroelectrics (T/E)—L. B. Rozenbaum. 14(1), 196–8(C) (Jul. 1972); CPM-7207D1155

Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-(x+y)}Al_xGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

Ground State and Phase Transition in a Ferromagnetic Plate Subjected to a Magnetic Field (T)—V. G. Bar'yakhtar and A. G. Kvirikadze. 14(2), 549–50(C) (Aug. 1972); CPM-7208E0706

Hysteresis-Type Amplitude-Dependent Losses in Ferrites (T/E)—L. B. Rozenbaum. 14(4), 1066–8(C) (Oct. 1972); CPM-7210D0881

Anomalies in the Coercive Force in the Compensation Temperature Region in Ferrite Spinels (E)—K. P. Belov, A. N. Goryaga and T. Ya. Gridasova. 14(5), 1225–7 (Nov. 1972); CPM-7211A1477

Instability of Domains in Nonlinear Ferromagnetic Resonance (E)—N. N. Kiryukhin, B. M. Mikhailov, Ya. A. Monosov and P. I. Nabokin. 14(6), 1573–4(C) (Dec. 1972); CPM-7212D0909

Magnetoelastic Attenuation in Nickel at High Ultrasonic Frequencies (E/T)—S. B. Grigor'ev and L. K. Kudryashova. 14(7), 1726–8 (Jan. 1973); CPM-7301C0686

Effect of the Sample Boundary and Domain Walls on the Electrical Properties of Magnetic Semiconductors (T)—Yu. I. Balkarei and L. N. Dzhavakhishvili. 14(8), 2081–4 (Feb. 1973); CPM-7302E1207

Intrinsic Emission from Yttrium Iron Garnet in the Presence of a Domain Structure (E)—N. I. Lyashenko, V. M. Talalaevskii and I. A. Mishina. 14(9), 2328–9 (Mar. 1973); CPM-7303E1152

Domain Structure of Orthoferrites near the Spin Reorientation Temperature and Its Effect on the Phase Transition (E/T)—A. K. Zvezdin and S. G. Kalenkov. 14(10), 2458–61 (Apr. 1973); CPM-7304E1104

Magnetic Anisotropy in Basal Plane of Hematite (E)—A. A. Bogdanov. 14(11), 2845–8 (May 1973); CPM-7305D1073

Magnetic and Magnetostrictive Properties of the Ferrite $CuCr_2O_4$ (E)—K. P. Belov, A. N. Goryaga, L. G. Antoshina and Yu. F. Popov. 14(12), 3071–2(C) (Jun. 1973); CPM-7306D0913

Low-Frequency Oscillations in Ferromagnets with Periodic Domain Structure (T)—A. S. Rozhavskii and E. M. Chudnovskii. 14(12), 3108–9(C) (Jun. 1973); CPM-7306D0950

5.50.40.90. Other Topics in Ferromagnetism, etc.

Direct Exchange Interaction Between Ions with Partly Filled 3d Shells (T)—R. L. Garifullina, M. V. Eremin and A. M. Leushin. 14(2), 317–24 (Aug. 1972); CPM-7208E0474

Parametric Excitation of Hypersound in Ferromagnets (T)—A. I. Akhiezer, V. G. Bar'yakhtar and A. G. Kvirikadze. 14(3), 757–9 (Sep. 1972); CPM-7209D0191

Effective Magnetic Fields at the Diamagnetic Tin Atoms in $MnSn_2$ (E)—V. A. Golovnin, S. B. Zezin and R. N. Kuz'min. 14(5), 1313–5(C) (Nov. 1972); CPM-7211A1565

Interaction of Surface Magnetostatic Waves with Elastic Rayleigh Waves in Cubic Ferromagnets (T)—V. I. Shcheglov. 14(6), 1417–20 (Dec. 1972); CPM-7212D0753

Parametric Excitation of Hypersound in Antiferromagnets (T)—B. A. Ivanov and A. G. Kvirikadze. 14(8), 1976–8 (Feb. 1973); CPM-7302E1102

Critical Scattering of Neutrons in Ferrites and Antiferromagnets in a Magnetic Field (T)—V. G. Bar'yakhtar, V. V. Tarasenko and D. A. Yablonskii. 14(8), 2006–9 (Feb. 1973); CPM-7302E1132

Mössbauer Determination of Orientation of Spins in the Tetrahedral Sublattice of $Bi_2Fe_4O_9$ (E/T)—V. A. Bokov, A. S. Kamzin and G. Ya. Karapet'yan. 14(8), 2168–70(C) (Feb. 1973); CPM-7302E1294

Intrinsic Emission from Yttrium Iron Garnet in the Presence of a Domain Structure (E)—N. I. Lyashenko, V. M. Talalaevskii and I. A. Mishina. 14(9), 2328–9 (Mar. 1973); CPM-7303E1152

Induced Magnetic Fields at Diamagnetic Atoms in an Antiferromagnet (E)—I. S. Lyubutin and A. P. Dodokin. 14(9), 2368–9(C) (Mar. 1973); CPM-7303E1192

Quantum Theory of an Isotropic Two-Sublattice Ferrimagnet in Applied Magnetic Fields (T)—D. A. Yablonskii. 14(10), 2468–74 (Apr. 1973); CPM-7304E1114

Propagation of Electromagnetic Waves in Ferromagnetic Metals with p-Type Conductivity (T)—L. M. Gorenko and R. G. Khlebopros. 14(11), 2694–5 (May 1973); CPM-7305D0922

Relaxation of the Fluctuations of Magnetization in Ferromagnets above the Curie Point (T)—G. A. Vugal'ter and S. V. Maleev. 14(11), 2764–6 (May 1973); CPM-7305D0992

Low-Frequency Oscillations in Ferromagnets with Periodic Domain Structure (T)—A. S. Rozhavskii and E. M. Chudnovskii. 14(12), 3108–9(C) (Jun. 1973); CPM-7306D0950

5.50.70. Magnetic Transitions

5.50.70.10. General

Structures with Exchange Interactions of the Electric and Magnetic Polarizations (T)—O. V. Kovalev. 14(4), 826–31 (Oct. 1972); CPM-7210D0641

5.50.70.20. Ferromagnetic–Paramagnetic Transitions

Some Features of a Magnetic Transition in Chromium Telluride (E)—A. A. Galkin, Z. A. Zavadskii and B. Ya. Sinel'nikov. 14(1), 125–9 (Jul. 1972); CPM-7207D1084

Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14 (2), 530–2(C) (Aug. 1972); CPM-7208E0687

Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-0.4y}Al_yGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

Phase Transitions in Polarized Media and the Role of the Inhomogeneous State (T)—V. G. Bar'yakhtar and V. F. Klepikov. 14(5), 1267–71 (Nov. 1972); CPM-7211A1519

Temperature Dependences of the Widths of the FMR and ESR Lines and of the g Factor of Yttrium Iron Garnet (E)—S. A. Mnatsakanyan and A. O. Marikyan. 14(6), 1575–6(C) (Dec. 1972); CPM-7212D0911

Sublimation of Cobalt in the Temperature Range Including the Curie Point (1320–1410°K) (E)—V. O. Khandros and N. A. Bogolyubov. 14(6), 1592–3(C) (Dec. 1972); CPM-7212D0928

Magnetic Structure and Temperature Dependences of Resonance Fields of Indium–Substituted M–Type Ferrites (E)—Yu. A. Mamalui, A. A. Murakhovskii and A. A. Taran. 14(7), 1703–6 (Jan. 1973); CPM-7301C0663

Effect of Fluctuons on the Equilibrium Properties of Semiconductors (T)—M. A. Krivoglaz. 14(7), 1801–9 (Jan. 1973); CPM-7301C0761

Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Magnetization of $Y_3Fe_5O_{12}$ near the Curie Point (E)—A. I. Okorokov and Ya. A. Kasman. 14(10), 2622–3(C) (Apr. 1973); CPM-7304E1268

Relaxation of the Fluctuations of Magnetization in Ferromagnets above the Curie Point (T)—G. A. Vugal'ter and S. V. Maleev. 14 (11), 2764–6 (May 1973); CPM-7305D0992

Study of the Magnetic Properties of χ and θ Iron Carbide Using Mössbauer Spectroscopy (E)—Yu. V. Maksimov, I. P. Suzdalev and R. A. Arents. 14(11), 2832–4 (May 1973); CPM-7305D1060

5.50.70.30. Ferromagnetic–Antiferromagnetic Transitions

Fluctuations and Scattering of Slow Neutrons and Electromagnetic Waves near the Critical Antiferromagnetic–Ferromagnetic Transition Point (T)—I. A. Akhiezer and A. É. Ginzburg. 14(1), 142–5 (Jul. 1972); CPM-7207D1101

Non–Heisenberg Exchange Interaction and Effects Due to this Interaction (T)—V. M. Matveev and E. L. Nagaev. 14(2), 408–15 (Aug. 1972); CPM-7208E0565

Radiation from Magnets during First–Order Phase Transformations (T)—B. A. Ivanov and A. G. Kvirikadze. 14(3), 592–5 (Sep. 1972); CPM-7209D0026

Interaction of Neutrons and Light with Magnetoacoustic Waves in Crystals Having a Ferromagnetic–Antiferromagnetic Transition (T)—A. É. Ginzburg, L. N. Davydov and Z. A. Spol'nik. 14(7), 1774–8 (Jan. 1973); CPM-7301C0734

Magnetic Anisotropy in Basal Plane of Hematite (E)—A. A. Bogdanov. 14(11), 2845–8 (May 1973); CPM-7305D1073

Mössbauer and Neutron–Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

5.50.70.40. Paramagnetic–Antiferromagnetic Transitions

Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

Magnetic Susceptibility of Holmium Near the Néel Point (E)—L. A. Boyarskii and M. A. Starikov. 14(6), 1588–9(C) (Dec. 1972); CPM-7212D0924

Impurity Atoms of Sn^{119} in the Helicoidal Antiferromagnet Au_3Mn (E)—N. N. Delyagin, É. N. Kornienko and V. I. Nesterov. 14(6), 1590–1(C) (Dec. 1972); CPM-7212D0926

5.50.70.90. Other Topics in Magnetic Transitions

Phase Diagram of the Three–Dimensional Ising Model Involving the Interaction of First and Second Neighbors (T)—P. N. Vorontsov–Vel'yaminov, N. B. Gromova and I. A. Favorskii. 14 (2), 490–2(C) (Aug. 1972); CPM-7208E0647

Ground State and Phase Transition in a Ferromagnetic Plate Subjected to a Magnetic Field (T)—V. G. Bar'yakhtar and A. G. Kvirikadze. 14(2), 549–50(C) (Aug. 1972); CPM-7208E0706

Method for Separating Different Components of the Ferrimagnetic Anisotropy (T)—R. Z. Levitin and A. S. Pakhomov. 14(5), 1276–9 (Nov. 1972); CPM-7211A1528

Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

Magnetic Transformation in Manganese Arsenide Induced by a Strong Magnetic Field (E)—A. A. Galkin and É. A. Zavadskii. 14(6), 1507–9 (Dec. 1972); CPM-7212D0843

Nuclear Magnetic Resonance in Ferroxplan Ferrites (E/T)—A. V. Kunevich, M. P. Petrov and B. N. Ermakov. 14(8), 2131–2(C) (Feb. 1973); CPM-7302E1257

Domain Structure of Orthoferrites near the Spin Reorientation Temperature and Its Effect on the Phase Transition (E/T)—A. K. Zvezdin and S. G. Kalenkov. 14(10), 2458–61 (Apr. 1973); CPM-7304E1104

Quantum Theory of an Isotropic Two–Sublattice Ferrimagnet in Applied Magnetic Fields (T)—D. A. Yablonskii. 14(10), 2468–74 (Apr. 1973); CPM-7304E1114

Initial Permeability of Magnetite in the Region of the Low–Temperature Phase Transition (E)—Yu. D. Tropin and A. A. Lepishev. 14(10), 2654–5(C) (Apr. 1973); CPM-7304E1300

Features of the Phase Transition in Magnetic Semiconductors Having a Narrow Forbidden Band (T)—Yu. I. Balkarei and V. G. Baru. 14 (11), 2773–5 (May 1973); CPM-7305D1001

Ferroelectric Phase Transition in a Ferroelectric–Ferromagnetic Material Subjected to a Magnetic Field (T)—I. E. Chupis and N. Ya. Piyushko. 14(11), 2907–8(C) (May 1973); CPM-7305D1135

5.50.80. Magnetomechanical Effects

Magnetic and Magnetoelastic Properties of $FeBO_3$ Single Crystals (E)—A. M. Kadomtseva, R. Z. Levitin, Yu. F. Popov, V. N. Seleznev and V. V. Uskov. 14(1), 172–4 (Jul. 1972); CPM-7207D1131

Distinguishing Features of Magnetic Properties of Single–Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1558

Magnetostriction of Cerium–Substituted Yttrium Iron Garnets (E)—K. P. Belov, N. V. Volkova, V. I. Raitsis and A. Ya. Chervonenkis. 14 (6), 1607–9(C) (Dec. 1972); CPM-7212D0943

Excitation of Magnetoelastic Waves in a Magnesium Spinel Single Crystal (E)—S. A. Mironov, L. Smoczynski, É. V. Rubal'skaya and Yu. M. Yakovlev. 14(6), 1612–4(C) (Dec. 1972); CPM-7212D0948

Magnetoelastic Attenuation in Nickel at High Ultrasonic Frequencies (E/T)—S. B. Grigor'ev and L. K. Kudryashova. 14(7), 1726–8 (Jan. 1973); CPM-7301C0686

Magnetostriction of Polycrystalline Holmium and Dysprosium Orthoferrites (E/T)—V. A. Borodin, A. M. Kadomtseva, N. M. Kovtun and V. A. Khokhlov. 14(8), 1950–2 (Feb. 1973); CPM-7302E1076

Magnetoelastic Coupling of Fe^{3+} Ions in Yttrium Iron Garnet (E/T)—É. A. Petrakovskaya and É. M. Smokotin. 14(11), 2888–9(C) (May 1973); CPM-7305D1116

Coupled Magnetoelastic Waves in Ferrites in Applied Magnetic Fields (T)—V. G. Bar'yakhtar and D. A. Yablonskii. 14(12), 3044–7 (Jun. 1973); CPM-7306D0886

Magnetic and Magnetostrictive Properties of the Ferrite $CuCr_2O_4$ (E)—K. P. Belov, A. N. Goryaga, L. G. Antoshina and Yu. F. Popov. 14(12), 3071–2(C) (Jun. 1973); CPM-7306D0913

5.50.85. Magnetothermal Effects, Including de Haas–van Alphen

Influence of Induced Anisotropy on Ferromagnetic Resonance Curves of Fe–Si Alloys (E)—O. I. Shiryaeva, I. E. Startseva and Ya. S. Shur. 14(11), 2779–80 (May 1973); CPM-7305D1007

5.50.90. Other Magnetic Effects and Properties

Ground State and Phase Transition in a Ferromagnetic Plate Subjected to a Magnetic Field (T)—V. G. Bar'yakhtar and A. G. Kvirikadze. 14(2), 549–50(C) (Aug. 1972); CPM-7208E0706

Use of Continuous Fractions to Determine the Carrier Energy in a Magnetic Field (T)—A. G. Prudius. 14(9), 2315–8 (Mar. 1973); CPM-7303E1139

5.55. MAGNETIC RESONANCE AND RELAXATION

5.55.20. Paramagnetic Resonances (e.g. EPR, ESR) and Relaxation

5.55.20.10. General Theory and Measurement Techniques

Effect of Spin–Lattice Relaxation and Ultrasound on the Perturbed γ–γ Angular Correlation in Paramagnets (E)—G. A. Denisenko and E. P. Khaimovich. 14(1), 106–10 (Jul. 1972); CPM-7207D1065

Shape of Paramagnetic Resonance Lines in Disordered Systems (T)—M. G. Blazha and A. B. Roitsin. 14(2), 416–20 (Aug. 1972); CPM-7208E0573

Correction to the Paper by V. A. Timofeev "Shift of the Paramagnetic Resonance Line Due to a Spin–Phonon Interaction" [11, 1897 (1970)] (E)—V. A. Timofeev. 14(4), 1089(C) (Oct. 1972); CPM-7210D0904

Spin—Lattice Relaxation in a Solid Dielectric Containing Paramagnetic Defects (T)—G. G. Sergeeva. 14(5), 1294–6 (Nov. 1972); CPM-7211A1546

Forbidden Transitions in Degenerate Spin Systems (E/T)—B. F. Alekseev and A. S. Serdyuk. 14(6), 1535–6(C) (Dec. 1972); CPM-7212D0871

Effect of Elastic Scattering on the Resonant Increase in the Kinetic Temperature under ESR Saturation Conditions (T)—V. P. Kalashnikov and Kh. M. Bikkin. 14(6), 1567–8(C) (Dec. 1972); CPM-7212D0903

Profile of the ESR Line of Localized Spins in Metals (T/E)—T. S. Al'tshuler, I. A. Garifullin, É. G. Kharakhash'yan and L. F. Shatrukov. 14(9), 2213–6 (Mar. 1973); CPM-7303E1037

EPR Line Shape in the Presence of the Spin–Phonon and Static Portions of Dipole–Dipole Interactions (T)—B. E. Vugmeister, V. L. Gokhman and V. Ya. Zevin. 14(9), 2280–4 (Mar. 1973); CPM-7303E1104

Theory of Paramagnetic Resonance Saturation in a Solid at Low Temperatures (T)—B. I. Kochelaev and R. R. Nigmatullin. 14(11), 2880–3 (May 1973); CPM-7305D1108

Two–Photon Absorption and Optical Orientation of Free Carriers in Cubic Crystals (T)—E. L. Ivchenko. 14(12), 2942–6 (Jun. 1973); CPM-7306D0784

Spin–Lattice Relaxation of Nuclei of Paramagnetic Ions (T)—M. P. Vaisfel'd. 14(12), 2996–9 (Jun. 1973); CPM-7306D0838

5.55.20.20. Paramagnetic Resonance of Iron Group (3d) Ions and Impurities (Ti–Cu)

EPR of Mn^{2+} Ions in Lithium Metavanadate (E/T)—G. L. Bir, L. V. Dmitrieva and S. A. Kizhaev. 14(1), 18–21 (Jul. 1972); CPM-7207D0977

Temperature Variation of EPR Line Splitting of Cr^{3+} in $ZnWO_4$ by an External Electric Field (E/T)—A. A. Bugai, O. G. Duliu, V. M. Maksimenko and Yu. B. Shevchenko. 14(2), 475–6(C) (Aug. 1972); CPM-7208E0632

ESR of Cr^{3+} in the Spinel $MgCr_2O_4$ Formed in the Glassy Matrix $2MgO.5SiO_2.2Al_2O_3.nCr_2O_3$ after Crystallization (E/T)—É. I. Abdrashitova and R. Ya. Khodakovskaya. 14(4), 1055–6(C) (Oct. 1972); CPM-7210D0870

Electron–Spin Echo from Cr^{3+} in Laser Ruby (T/E)—U. Kh. Kopvillem, B. P. Smolyakov and R. Z. Sharipov. 14(5), 1239–40 (Nov. 1972); CPM-7211A1491

Influence of Temperature on the ESR Spectrum of Mn^{2+} in Ca_2SO_4 (E)—R. Yu. Abdulsabirov, Yu. S. Greznev, M. M. Zaripov and V. G. Stepanov. 14(6), 1569–70(C) (Dec. 1972); CPM-7212D0905

Off–Center Position of Mn^+ Ions in KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov, N. I. Mel'nikov and N. G. Romanov. 14(7), 1842–3(C) (Jan. 1973); CPM-7301C0802

Exchange Narrowing of Paramagnetic Resonance Line in Chromium Chalcogenide Spinels (E)—A. A. Samokhvalov, V. S. Babushkin, M. I. Simonova and T. I. Arbuzova. 14(7), 1883–4(C) (Jan. 1973); CPM-7301C0843

Nuclear Magnetic Resonance in Ferroxplan Ferrites (E/T)—A. V. Kunevich, M. P. Petrov and B. N. Ermakov. 14(8), 2131–2(C) (Feb. 1973); CPM-7302E1257

Dependence on Concentration and Frequency of Spin–Lattice Relaxation of Co^{2+} in Monoclinic Tungstates (E)—A. D. Prokhorov and G. A. Tsintsadze. 14(11), 2802–4 (May 1973); CPM-7305D1030

ESR Spectrum of Cr^{3+} Ions in $LiGa_5O_8$ at Low Temperatures (E)—A. Yu. Kozhukhar', V. N. Seleznev, G. A. Tsintsadze and V. A. Shapovalov. 14(11), 2892–3(C) (May 1973); CPM-7305D1120

Influence of a Phase Transition of the First Kind on the ESR Spectrum of Mn^{2+} in $(NH_4)_2SO_4$ (E)—R. Yu. Abdulsabirov, Yu. S. Greznev and M. M. Zaripov. 14(11), 2894–5(C) (May 1973); CPM-7305D1122

Spin–Lattice Relaxation of Co^{2+} Ions in $Na_2Zn(SO_4)_2.4H_2O$ and $Na_2Cd(SO_4)_2.2H_2O$ Single Crystals (E)—R. S. Tukhvatullin, A. A. Fedii and Yu. K. Chirkin. 14(11), 2896–7(C) (May 1973); CPM-7305D1124

Electron Spin Resonance of V^{2+} Ions in BaF_2 (E)—R. Yu. Abdulsabirov, V. S. Kropotov, M. S. Orlov and V. G. Stepanov. 14 (11), 2917(C) (May 1973); CPM-7305D1145

Degeneracy of Spin States in Complexes of Paramagnetic Ions (T)—B. A. Men', A. N. Men' and V. I. Cherepanov. 14(12), 2931–5 (Jun. 1973); CPM-7306D0773

Paramagnetic Ions of Gd^{3+} and Mn^{2+} in an ScF_3 Crystal (E)—L. S. Starostina, B. N. Grechushnikov and V. F. Koryagin. 14(12), 2936–8 (Jun. 1973); CPM-7306D0778

Exchange–Coupled Pairs of Mn^{2+} Ions in NaCl (E)—R. L. Garifullina, M. M. Zaripov, V. G. Stepanov and Yu. N. Tolparov. 14(12), 2959–61 (Jun. 1973); CPM-7306D0801

5.55.20.25. Paramagnetic Resonance of Platinum and Palladium Group (4d and 5d) Ions and Impurities (e.g. Zr–Ag and Hf–Au)

Acentric Position of Silver Anions in a KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov and N. I. Mel'nikov. 14(7), 1876–8(C) (Jan. 1973); CPM-7301C0836

ESR of Hg^+ Ions in K_2SO_4 Crystals (E)—V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(10), 2642–3(C) (Apr. 1973); CPM-7304E1288

5.55.20.30. Paramagnetic Resonance of Rare–Earth Ions and Impurities

Compensation of the Excess Charge During Activation of Scheelites with Rare–Earth Ions (E)—R. Yu. Abdulsabirov, A. A. Antipin, I. N. Kurkin, E. A. Tsvetkov, Yu. K. Chirkin and V. I. Shlenkin. 14 (1), 255–7(C) (Jul. 1972); CPM-7207D1214

Spin–Lattice Relaxation Mechanisms in the Crystal CaF_2–Dy^{3+} (I) (E)—V. S. Zapasskii. 14(4), 1069–70(C) (Oct. 1972); CPM-7210D0884

Temperature Dependences of the Widths of the FMR and ESR Lines and of the g Factor of Yttrium Iron Garnet (E)—S. A. Mnatsakanyan and A. O. Marikyan. 14(6), 1575–6(C) (Dec. 1972); CPM-7212D0911

Relaxation of Mössbauer Spectra of $DyVO_4$ (E)—V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Interpretation of the ESR Spectrum of Gd^{3+} Ions in a Trigonal Crystal Field (T)—M. L. Meil'man. 14(10), 2612–3(C) (Apr. 1973); CPM-7304E1258

Effect of the Indirect Exchange Interaction on the Crystal Field Parameters of Rhombic Er^{3+} Centers in Fluorite Crystals (T/E)—I. B. Aizenberg, M. D. Davydova and A. L. Stolov. 14(11), 2710–2 (May 1973); CPM-7305D0938

Electron Spin Resonance of Gd^{3+} in $CaEu(MoO_4)_2$ and $CaY(MoO_4)_2$ (E)—A. I. Otko, L. N. Pelikh and A. I. Zvyagin. 14 (11), 2918(C) (May 1973); CPM-7305D1146

Paramagnetic Ions of Gd^{3+} and Mn^{2+} in an ScF_3 Crystal (E)—L. S. Starostina, B. N. Grechushnikov and V. F. Koryagin. 14(12), 2936–8 (Jun. 1973); CPM-7306D0778

Spin–Lattice Relaxation of Nuclei of Paramagnetic Ions (T)—M. P. Vaisfel'd. 14(12), 2996–9 (Jun. 1973); CPM-7306D0838

5.55.20.40. Paramagnetic Resonance of Color Centers and Complex Centers

Paramagnetic Centers Produced by Mechanical Destruction of Silica (E/T)—K. A. Akhmed–zade, V. V. Baptizmanskii, V. A. Zakrevskii and É. E. Tomashevskii. 14(2), 351–4 (Aug. 1972); CPM-7208E0508

Impurity Absorption Spectra of Silicon Carbide in the Near Infrared Region (E)—I. S. Gorban', Yu. A. Marazuev and A. S. Skirda. 14 (3), 664–7 (Sep. 1972); CPM-7209D0098

Mechanism of Radiation–Induced Coloring of KCl:Ag Crystals (E/T) —N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(3), 753–6 (Sep. 1972); CPM-7209D0187

Hybridization of the Atomic Orbitals at Structural Defects in Si (T)— A. N. Zhevno, V. F. Stel'makh and V. D. Tkachev. 14(4), 1007–11 (Oct. 1972); CPM-7210D0822

Investigation of Silver Atoms in Mixed Alkali Halide Crystals (E)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(6), 1488–92 (Dec. 1972); CPM-7212D0824

Model of Irradiation–Produced ESR Centers in Aluminosilicates (T/E)—V. S. Grunin, V. A. Ioffe and I. S. Yanchevskaya. 14(7), 1839–41(C) (Jan. 1973); CPM-7301C0799

5.55.20.50. Paramagnetic Resonance of Other Point Defects (Including Free Radicals)

Diffusion Processes in Irradiated Molecular Crystals (E/T)—A. I. Mikhailov, A. I. Bol'shakov, Ya. S. Lebedev and V. I. Gol'danskii. 14(4), 1000–6 (Oct. 1972); CPM-7210D0815

Exchange Broadening of the Hyperfine Components of the ESR Spectrum of Nitrogen in Diamond (E/T)—L. A. Shul'man and G. A. Podzyarei. 14(6), 1521–6 (Dec. 1972); CPM-7212D0857

Defect Distribution near a Paramagnetic Center (T/E)—M. G. Blazha, A. A. Bugai, V. M. Maksimenko and A. B. Roitsin. 14(7), 1779–82 (Jan. 1973); CPM-7301C0739

Determination of the Probability of $\Delta M_S=2$ Transitions in ESR Spectra by Microwave Saturation Method (E)—O. Ya. Grinberg, A. A. Dubinskii, B. V. Ozherel'ev, A. A. Chistota and Ya. S. Lebedev. 14(11), 2886–7(C) (May 1973); CPM-7305D1114

Coloration of PbF_2 Crystals by Irradiation and Their Electrical Properties (E)—V. A. Arkhangel'skaya, V. G. Erofeichev and M. N. Kiseleva. 14(12), 2953–5 (Jun. 1973); CPM-7306D0795

5.55.20.90. Other Topics in Paramagnetic Resonances

Observation of Electron Spin Resonance in a Type–II Superconductor (E)—T. S. Al'tshuler, I. A. Garifullin and É. G. Kharakhash'yan. 14(1), 213–4(C) (Jul. 1972); CPM-7207D1172

Magnetic Properties of Ti^{3+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682

Paramagnetic Resonance Absorption of Ultrasound by Conduction Electrons (T)—S. I. Goryachikh and B. M. Khabibullin. 14(4), 860–3 (Oct. 1972); CPM-7210D0675

Circular Polarization of Recombination Light of Semiconductors in a Weak Magnetic Field (T)—M. I. D'yakonov and V. I. Perel'. 14 (5), 1245–50 (Nov. 1972); CPM-7211A1497

Spin–Lattice Relaxation of Hydrogen Atoms and Paramagnetic Ions in Sulfuric Acid Vitreous Aqueous Solutions at 77°K (E/T)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1915–8 (Feb. 1973); CPM-7302E1041

Spin Diffusion and Spin–Lattice Relaxation Kinetics of Hydrogen Atoms in Glassy Matrices at 77°K (T/E)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1956–60 (Feb. 1973); CPM-7302E1082

Theory of the ESR Spectra of a Pair of Paramagnetic Ions Allowing for Antisymmetrical Exchange Interaction (T)—V. I. Cherepanov, S. E. Krestnikov and A. I. Krotkii. 14(8), 1990–2 (Feb. 1973); CPM-7302E1116

Reduction Factors of Jahn–Teller Systems (T)—V. Z. Polinger, Yu. B. Rozenfel'd, B. S. Tsukerblat and B. G. Vekhter. 14(8), 2165–7(C) (Feb. 1973); CPM-7302E1291

Behavior of Alkali Atoms Introduced into the Xenon Lattice (T)—M. A. Belogolovskii and K. B. Tolpygo. 14(10), 2571–4 (Apr. 1973); CPM-7304E1217

5.55.30. Ferromagnetic, Ferrimagnetic, and Antiferromagnetic Resonances and Relaxation and Spin–Wave Spectra

Ferromagnetic Resonance in Unsaturated Crystals of Magnetoplumbite (E)—M. A. Sigal and V. P. Cherevko. 14(1), 30–6 (Jul. 1972); CPM-7207D0989

Theory of Ferromagnetic Resonance in Single Crystals with Anisotropic g Factor (T)—N. F. Balakhonov, L. V. Kurbatov and A. V. Shitikov. 14(1), 101–5 (Jul. 1972); CPM-7207D1060

Nonlinear Magnetoelastic Phenomena in Ferromagnetic Resonance (T)—I. P. Shantsev and V. E. Shapiro. 14(1), 175–7 (Jul. 1972); CPM-7207D1134

Anisotropy of the Above–Threshold Susceptibility of Yttrium Iron Garnet under Parallel Pumping Conditions (E)—M. A. Sigal. 14 (1), 234–5(C) (Jul. 1972); CPM-7207D1193

Nature of the Spin Echo in Ferrites (E)—I. A. Deryugin, Yu. A. Nechiporuk and A. V. Tychinskii. 14(1), 264–5(C) (Jul. 1972); CPM-7207D1223

High–Frequency Magnetic Properties of Nickel—Cobalt—Zinc Ferrites (E)—S. A. Poltinnikov and O. N. Tatarenko. 14(2), 349–50 (Aug. 1972); CPM-7208E0506

Anisotropy of the Spin Wave Excitation Threshold (T)—P. I. Nabokin and V. G. Shavrov. 14(2), 434–6 (Aug. 1972); CPM-7208E0591

Properties of a Magnetic Impurity Atom Located between Magnetic Sublattices in Antiferromagnets (T)—M. A. Ivanov. 14(2), 467–74 (Aug. 1972); CPM-7208E0624

Spin–Wave Spectrum in Films Having a Band Periodic Domain Structure (T)—N. M. Salanskii and M. Sh. Erukhimov. 14(2), 511–3(C) (Aug. 1972); CPM-7208E0668

Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-(x+y)}Al_xGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

Spin–Wave Resonance in Thin Single–Crystal Films of Manganese Ferrite (E)—B. D. Ivanov, B. A. Kalinikos, O. A. Rybinskii and D. N. Chartorizhskii. 14(2), 561–2(C) (Aug. 1972); CPM-7208E0718

Natural Ferromagnetic Resonance in the Garnets $Y_3Fe_{5-x}Al_xO_{12}$ (E/T) —S. A. Poltinnikov, V. P. Polyakov, O. B. Proskuryakov, V. K. Pukhova and V. M. Yudin. 14(3), 777–8(C) (Sep. 1972); CPM-7209D0211

Spin Waves in Anisotropic Antiferromagnets (T)—B. P. Toperverg. 14 (4), 931–3 (Oct. 1972); CPM-7210D0746

Coupled Electromagnetic–Magnon Waves and Scattering of Particles in Antiferromagnetic Metals (T)—E. M. Chudnovskii. 14(4), 1035–9 (Oct. 1972); CPM-7210D0850

Residual Action of High Pressure on the Width of Ferromagnetic Resonance Lines in $Y_3Fe_{5-x}Ga_xO_{12}$ Single Crystals (E)—V. A. Korchin, V. A. Ruban, V. V. Danilov and V. V. Zaporozhets. 14 (5), 1329–30(C) (Nov. 1972); CPM-7211A1581

Ferromagnetic Resonance in Plastically Deformed Permalloy and Iron (E)—E. F. Kondrat'ev, V. G. Pinchuk and V. M. Slobodyanik. 14 (5), 1352–3(C) (Nov. 1972); CPM-7211A1604

Instability of Domains in Nonlinear Ferromagnetic Resonance (E)— N. N. Kiryukhin, B. M. Mikhailov, Ya. A. Monosov and P. I. Nabokin. 14(6), 1573–4(C) (Dec. 1972); CPM-7212D0909

Temperature Dependences of the Widths of the FMR and ESR Lines and of the g Factor of Yttrium Iron Garnet (E)—S. A. Mnatsakanyan and A. O. Marikyan. 14(6), 1575–6(C) (Dec. 1972); CPM-7212D0911

Localized States of Spin Systems with Two–Dimensional Defects (T) —V. I. Khokhlov. 14(6), 1577–8(C) (Dec. 1972); CPM-7212D0913

Spin–Wave Resonance Spectrum in a Thin Ferromagnetic Layer with Mixed Boundary Conditions (T)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1826–7(C) (Jan. 1973); CPM-7301C0786

Magnetic Field Dependence of the Velocity of Sound in Ferromagnets and Antiferromagnets (T/E)—V. I. Shcheglov. 14(7), 1889–90(C) (Jan. 1973); CPM-7301C0849

Broadening of a Ferromagnetic Resonance Line by Chemical Magnetic Inhomogeneities (E)—A. A. Manuilova, V. E. Zuev, S. P. Stanishevskaya and V. Ya. Dubossarskaya. 14(9), 2365–6(C) (Mar. 1973); CPM-7303E1189

Instability of Uniform Oscillations of the Magnetic Moment of a Ferromagnet (T)—V. G. Bar'yakhtar, B. A. Ivanov and A. G. Kvirikadze. 14(9), 2385–6(C) (Mar. 1973); CPM-7303E1209

Parametric Excitation of Spin Waves in Ferromagnets with Magnetic Inhomogeneities (T)—V. E. Zakharov and V. S. L'vov. 14(10), 2513–9 (Apr. 1973); CPM-7304E1159
Magnon Thermal Conductivity of Antiferromagnetic Metals (T)—I. Ya. Korenblit and B. G. Tankhilevich. 14(10), 2588–90 (Apr. 1973); CPM-7304E1234
Self–Interaction of Finite–Amplitude Magnetoelastic Waves (E)—Dao Tkhu Nguyen, V. A. Krasil'nikov, S. B. Samorukov and V. I. Uchastkin. 14(10), 2632–3(C) (Apr. 1973); CPM-7304E1278
Selective Transparency of Ferromagnetic Metal Plates near Antiresonance (T)—M. I. Kaganov and A. S. Mikhailov. 14(11), 2748–50 (May 1973); CPM-7305D0976
Relaxation of the Fluctuations of Magnetization in Ferromagnets above the Curie Point (T)—G. A. Vugal'ter and S. V. Maleev. 14 (11), 2764–6 (May 1973); CPM-7305D0992
Influence of Induced Anisotropy on Ferromagnetic Resonance Curves of Fe–Si Alloys (E)—O. I. Shiryaeva, I. E. Startseva and Ya. S. Shur. 14(11), 2779–80 (May 1973); CPM-7305D1007
Ferromagnetic Resonance in Gadolinium Aluminum Iron Garnets near the Compensation Points (E)—B. M. Lebed' and V. I. Mosel'. 14(11), 2781–3 (May 1973); CPM-7305D1009
Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14(11), 2835–7 (May 1973); CPM-7305D1063
Far–Infrared Absorption Spectrum of Antiferromagnetic Nickel Tungstate (E)—V. I. Kut'ko, V. M. Naumenko and A. I. Zvyagin. 14(11), 2900–1(C) (May 1973); CPM-7305D1128
Low–Temperature Absorption of Ultrasound in Ferromagnetic Insulators with Weak Anisotropy (T)—T. E. Rodkina and V. M. Tsukernik. 14(12), 2956–8 (Jun. 1973); CPM-7306D0798

5.55.50. Nuclear Resonances (NMR) and Relaxation

5.55.50.10. General Theory and Measurement Techniques

Determination of the Parameters of Dipole–Dipole and Quadrupole Interactions (T)—V. A. Bakaev. 14(9), 2434–5(C) (Mar. 1973); CPM-7303E1258

5.55.50.30. Nuclear–Spin Relaxation Effects

Nuclear Magnetic Resonance and Weak Ferromagnetism in $FeBO_3$ (E)—M. P. Petrov, G. A. Smolenskii, A. P. Paugurt, S. A. Kizhaev and M. K. Chizhov. 14(1), 87–91 (Jul. 1972); CPM-7207D1046
Spin–Lattice Relaxation of Energy of Dipole–Dipole Reservoir and Slow Motion in Crystalline Beryllium Oxyacetate (E/T)—V. E. Lyapukhov and O. P. Revokatov. 14(2), 502–3(C) (Aug. 1972); CPM-7208E0659
Spin–Lattice Relaxation of Nuclei of Rare Earth Ions with a Singlet Electronic Ground State (T)—M. P. Vaisfel'd. 14(3), 628–31 (Sep. 1972); CPM-7209D0062
Acoustic Saturation and Amplification of Na^{23} NMR Lines in $NaNO_3$ Crystals (E/T)—V. M. Sarnatskii and V. A. Shutilov. 14(3), 649–54 (Sep. 1972); CPM-7209D0083
Effect of Dislocation Broadening on the Shape of a Nuclear Magnetic Resonance Line (E)—Yu. A. Grinchenko and B. L. Timan. 14(6), 1404–7 (Dec. 1972); CPM-7212D0740
NMR Study of Spin Reorientation in the Weak Ferromagnet $ErFeO_3$ (E/T)—N. M. Kovtun, A. S. Karnachev, E. E. Solov'ev, A. Ya. Chervonenkis and A. A. Shemyakov. 14(7), 1856–8(C) (Jan. 1973); CPM-7301C0816
Ion–Lattice Relaxation and Nuclear Spin–Lattice Relaxation of Li^+ in KCl (T)—A. A. Karmazin and M. D. Glinchuk. 14(8), 2144–5(C) (Feb. 1973); CPM-7302E1270
Magnetic Resonance at Nuclei of Rare–Earth Ions Having a Nonmagnetic Doublet Ground State (T)—M. P. Vaisfel'd and M. A. Teplov. 14(9), 2243–5 (Mar. 1973); CPM-7303E1067
Spin–Lattice Relaxation of Mo^{3+} Ions in $LaNbO_3$ Single Crystals (E) —I. N. Kurkin, Yu. K. Chirkin and V. I. Shlenkin. 14(9), 2348–51 (Mar. 1973); CPM-7303E1172
Nuclear Magnetic Resonance of V^{51} Nuclei in Vanadium–Rich Fe–V Alloys (E)—S. P. Repnikov and V. B. Ustinov. 14(9), 2375–7(C) (Mar. 1973); CPM-7303E1199
NMR Investigation of Electron Ordering in Magnetite (E)—N. M. Kovtun, E. E. Solov'ev and A. A. Shemyakov. 14(9), 2430–1(C) (Mar. 1973); CPM-7303E1254
Spin–Lattice Relaxation of Nuclei of Paramagnetic Ions (T)—M. P. Vaisfel'd. 14(12), 2996–9 (Jun. 1973); CPM-7306D0838

5.55.50.40. Nuclear Quadrupole Resonances (NQR)

Orientational Quadrupolar Relaxation in NMR Crystals (T)—Yu. L. Popov, N. K. Gaisin, F. I. Bashirov, K. S. Saikin and R. A. Dautov. 14(5), 1199–202 (Nov. 1972); CPM-7211A1451
Theory of Quadrupolar Spin Echo in Polycrystalline Samples Excited by Coherent Resonance Pulses (T)—M. A. Korchemkin. 14(8), 2019–21 (Feb. 1973); CPM-7302E1145
Equations for Nuclear Quadrupole Relaxation in Molecular Crystals Allowing for Nondiagonal Elements of the Density Matrix (T)—N. N. Korst, V. V. Tsyganov and N. B. Ainbinder. 14(8), 2118–9(C) (Feb. 1973); CPM-7302E1244
Theory of Saturation of Nuclear Quadrupole Resonance (T)—I. L. Bukhbinder and A. R. Kessel'. 14(11), 2726–31 (May 1973); CPM-7305D0954

5.55.50.50. Electron–Nuclear Double Resonances (ENDOR)

Electron–Nuclear Double Resonance of the Triplet State of M Centers in KCl (E/T)—Yu. V. Fedotov, N. N. Bagmut and I. V. Matyash. 14(2), 519–20(C) (Aug. 1972); CPM-7208E0676

5.55.50.90. Other Topics in NMR

Character of Electron–Nuclear Interactions in Metal–Hydrogen Systems Based on Transition Metals of Group IVb (E/T)—E. F. Khodosov and N. A. Shepilov. 14(3), 807–8(C) (Sep. 1972); CPM-7209D0241

5.55.60. Diamagnetic and Cyclotron Resonances and Relaxation

Microwave–Induced Anisotropy of Conductivity of Semiconductors in Quantizing Magnetic Fields (T)—V. I. Ryzhii. 14(1), 27–9 (Jul. 1972); CPM-7207D0986
Influence of a Constant Electric Field on Cyclotron Waves (T)—L. É. Gurevich and A. Ya. Shik. 14(1), 58–61 (Jul. 1972); CPM-7207D1017

5.55.90. Other Topics in Magnetic Resonance and Relaxation Phenomena

Coupled Spin Waves and the Magnon—Magnon Resonance in Antiferromagnets (T)—V. A. Popov and V. I. Skidanenko. 14(2), 421–7 (Aug. 1972); CPM-7208E0578
Localized and Quasilocalized Vibrations in Anharmonic Raman Spin–Lattice Relaxation (T)—V. Ya. Zevin and V. I. Konovalov. 14(3), 738–42 (Sep. 1972); CPM-7209D0172
Possible Parametric Resonance in Degenerate n–Type InSb (E)—N. L. Tsintsadze and V. S. Paverman. 14(11), 2890–1(C) (May 1973); CPM-7305D1118

5.60. OPTICAL PROPERTIES OF SOLIDS

5.60.20. Optical Constants of Materials and Optical Parameters

5.60.20.20. Optical Constants of Metals and Semimetals

Optical Absorption in Tungsten at T=77°K (E)—L. V. Nomerovannaya, M. M. Kirillova and M. M. Noskov. 14(2), 541–2(C) (Aug. 1972); CPM-7208E0698
Optical Properties of Copper–Nickel Alloys in the Visible and Ultraviolet Regions of the Spectrum (E)—I. I. Sasovskaya and M. M. Noskov. 14(4), 857–9 (Oct. 1972); CPM-7210D0672
Thermoreflection in Polyvalent Metals in the Bragg Band–Band Transition Range (E)—A. I. Golovashkin, K. V. Mitsen and G. P. Motulevich. 14(6), 1467–72 (Dec. 1972); CPM-7212D0803

5.60.20.30. Optical Constants of Insulators

Surface Optical Vibrations in Ionic Crystal Plates (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(2), 453–9 (Aug. 1972); CPM-7208E0610

Erratum: Photoelastic Constants of Alkaline Earth Fluorides [13, 3142 (1972,12)] (E)—O. V. Shakin, M. F. Bryzhina and V. V. Lemanov. 14(5), 1370 (Nov. 1972); CPM-7211A1622

Temperature Variation of the Optic Angle in Rochelle Salt Crystals (E)—I. F. Vibiyi. 14(8), 2133–4(C) (Feb. 1973); CPM-7302E1259

5.60.20.40. Optical Constants of Semiconductors

Effect of Crystal Lattice Disorder on the Vibrational Spectrum and the Optical States of $CdGeP_2$ (E)—Yu. F. Markov and N. B. Reshetnyak. 14(1), 37–40 (Jul. 1972); CPM-7207D0996

Photoconductivity of Yttrium Ferrite Garnet (E)—V. V. Eremenko, A. P. Kirichenko, V. N. Rubtsov and V. S. Smirnov. 14(4), 1057–8 (Oct. 1972); CPM-7210D0872

Plasmon–Phonon Interaction in Gallium Antimonide (T/E)—N. V. Bozhovskaya and V. K. Subashiev. 14(7), 1627–33 (Jan. 1973); CPM-7301C0587

5.60.20.90. Other Topics on Optical Constants and Parameters

Long–Wave Optical Vibration Spectrum of Vanadium Pentoxide (E)—I. I. Reshina. 14(2), 287–90 (Aug. 1972); CPM-7208E0444

Reflection of $Eu_{1-x}Gd_xO$ Single Crystals in the Visible and Infrared Spectra (E/T)—A. A. Samokhvalov, G. P. Skornyakov, N. N. Loshkareva, G. V. B. Birkle, M. I. Simonova and T. P. Chukina. 14(5), 1177–80 (Nov. 1972); CPM-7211A1429

Reduction in the Optical Strength of Transparent Solids Containing Macroscopic Defects (E)—Ya. E. Geguzin, A. K. Emets and Yu. I. Boiko. 14(5), 1350–1(C) (Nov. 1972); CPM-7211A1602

5.60.30. Piezo–, Elasto–, and Acousto–Optical Effects

Investigation of the Acoustoelectric Instability in CdS by the Scattering of Light by Sound (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(1), 76–82 (Jul. 1972); CPM-7207D1035

Light Scattering by Elastic Waves in Uniaxial Crystals (T/E)—V. V. Lemanov and O. V. Shakin. 14(1), 184–9 (Jul. 1972); CPM-7207D1143

Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14 (3), 732–7 (Sep. 1972); CPM-7209D0166

Flow–Stress Spectroscopy of NaCl Crystals Containing Color Centers (E)—G. A. Ermakov and É. M. Nadgornyi. 14(4), 1101–3(C) (Oct. 1972); CPM-7210D0916

Erratum: Photoelastic Constants of Alkaline Earth Fluorides [13, 3142 (1972,12)] (E)—O. V. Shakin, M. F. Bryzhina and V. V. Lemanov. 14(5), 1370 (Nov. 1972); CPM-7211A1622

Kinetics of the Photoplastic Effect and Its Dependence on Orientation (E)—Yu. A. Osip'yan and I. B. Savchenko. 14(7), 1723–5 (Jan. 1973); CPM-7301C0683

Collinear Interaction of Elastic and Light Waves in a Lithium Niobate Single Crystal (E)—K. K. Ermilin and N. F. Reshetnikov. 14(7), 1871–3(C) (Jan. 1973); CPM-7301C0831

Acoustooptical Investigation of Sound Wave Interactions in Cadmium Sulfide (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(9), 2259–63 (Mar. 1973); CPM-7303E1083

Piezooptic Investigations of the Exciton Spectrum of CdS (E)—M. S. Brodin, I. V. Blonskii, N. A. Davydova and M. I. Strashnikova. 14 (11), 2841–4 (May 1973); CPM-7305D1069

5.60.35. Electro–Optical Properties and Effects

Linear Electrooptical Effect in Gallium Selenide (E)—V. I. Sokolov and V. K. Subashiev. 14(1), 178–83 (Jul. 1972); CPM-7207D1137

Influence of Nonequilibrium Carriers on the Domain Structure of the Ferroelectric Semiconductor SbSI (E)—B. S. Agaronov, N. M. Bezdetnyi, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(1), 205–6(C) (Jul. 1972); CPM-7207D1164

Linear Electrooptical Effect in Gallium Phosphide (E)—G. F. Glinskii, A. N. Pikhtin and D. A. Yas'kov. 14(2), 291–4 (Aug. 1972); CPM-7208E0448

Magnetooptical Resonance in Manganese Ferrite in the Visible Spectral Region (E)—A. V. Malakhovskii, I. S. Édel'man and G. G. Vasil'ev. 14(3), 681–3 (Sep. 1972); CPM-7209D0115

Electroabsorption in CdTe (E/T)—R. M. Akopyan, Yu. N. Berozashvili, A. V. Dundua and D. Sh. Lordkipanidze. 14(3), 801–2(C) (Sep. 1972); CPM-7209D0235

Form of the Electroreflection Spectrum in InP (E)—Yu. F. Kavalyauskas and A. Yu. Shileika. 14(4), 915–9 (Oct. 1972); CPM-7210D0730

"Optical Cooling" of Conduction Electrons in Conductors (T)—A. G. Aronov and V. L. Gurevich. 14(4), 966–70 (Oct. 1972); CPM-7210D0781

Exciton Electroabsorption in 6H SiC (E)—G. B. Dubrovskii and V. I. Sankin. 14(4), 1024–6 (Oct. 1972); CPM-7210D0839

Faraday Effect in Semiconductors in Strong Electric Fields (T)—Z. S. Kachlishvili. 14(5), 1309–10(C) (Nov. 1972); CPM-7211A1561

New Mechanism of Current–Stimulated Emission of Electromagnetic Waves from Crystals (T/E)—I. V. Ioffe. 14(6), 1421–3 (Dec. 1972); CPM-7212D0757

Electrooptical Effect in Ferroelectric Crystals Having a Smeared Phase Transition (E/T)—A. A. Berezhnoi. 14(7), 1756–60 (Jan. 1973); CPM-7301C0716

Longitudinal Electrooptic Effect in Lead Magnoniobate Crystals (E)—A. A. Berezhnoi. 14(9), 2230–3 (Mar. 1973); CPM-7303E1054

Anomalous Change of Polar Kerr Effect in Nickel and Iron in a Strong Magnetic Field (E/T)—I. S. Edel'man, A. V. Malakhovskii, T. P. Morozova, A. T. Slivinskaya and G. S. Veisig. 14(11), 2770–2 (May 1973); CPM-7305D0998

Electrooptic Effect in Vanadium Pentoxide Single Crystals below the Fundamental Absorption Edge (E/T)—V. G. Mokerov and B. L. Sigalov. 14(11), 2875–9 (May 1973); CPM-7305D1103

Influence of Uniaxial Compression on the Anisotropy of the Electroabsorption of Light in GaAs (E)—Yu. N. Berozashvili, O. V. Gogolin and D. Sh. Lordkipanidze. 14(11), 2926–7(C) (May 1973); CPM-7305D1154

Franz–Keldysh Effect in the Impurity Absorption Region (T/E)—Fan Ba Nyan, V. B. Stopachinskii and M. V. Fok. 14(12), 3000–3 (Jun. 1973); CPM-7306D0842

Electrooptical Effect due to Virtual Interband Transitions (T)—F. T. Vas'ko. 14(12), 3081–2(C) (Jun. 1973); CPM-7306D0923

5.60.40. Magneto–Optical Properties and Effects

Forbidden Indirect Transitions in Germanium Subjected to a Magnetic Field (E)—V. I. Zemskii. 14(1), 217–8(C) (Jul. 1972); CPM-7207D1176

Radiation from Magnets during First–Order Phase Transformations (T)—B. A. Ivanov and A. G. Kvirikadze. 14(3), 592–5 (Sep. 1972); CPM-7209D0026

Multiphoton Interband Transitions in a Quantizing Magnetic Field (T) —I. A. Chaikovskii, V. A. Kovarskii and E. Yu. Perlin. 14(3), 620–4 (Sep. 1972); CPM-7209D0054

Magnetooptical Resonance in Manganese Ferrite in the Visible Spectral Region (E)—A. V. Malakhovskii, I. S. Édel'man and G. G. Vasil'ev. 14(3), 681–3 (Sep. 1972); CPM-7209D0115

Theory of Indirect Magnetooptical Transitions due to Inelastic Carrier–Impurity Interaction (T)—G. K. Vlasov. 14(5), 1160–3 (Nov. 1972); CPM-7211A1412

Faraday Effect in Semiconductors in Strong Electric Fields (T)—Z. S. Kachlishvili. 14(5), 1309–10(C) (Nov. 1972); CPM-7211A1561

Permittivity Tensor of Manganese Ferrite in the Visible Range of Wavelengths (T/E)—A. V. Malakhovskii, I. S. Édel'man and O. A. Rybinskii. 14(6), 1462–6 (Dec. 1972); CPM-7212D0798

Theory of Optomagnetic Waves in Semiconductors and Semimetals (T)—I. V. Ioffe and L. F. Mezrina. 14(6), 1527–8(C) (Dec. 1972); CPM-7212D0863

Instability of Domains in Nonlinear Ferromagnetic Resonance (E)—N. N. Kiryukhin, B. M. Mikhailov, Ya. A. Monosov and P. I. Nabokin. 14(6), 1573–4(C) (Dec. 1972); CPM-7212D0909

Photoconductivity of Semiconductors in Strong Magnetic Fields (T)—A. D. Malov and V. I. Ryzhii. 14(7), 1766–9 (Jan. 1973); CPM-7301C0726

Effect of Inelastic Interaction of Carriers on the Absorption of Light in Semiconductors (T)—G. K. Vlasov. 14(7), 1794–800 (Jan. 1973); CPM-7301C0754

Optical Orientation of Excitons and the Hanley Effect in Gallium Selenide (E)—Yu. P. Veshchunov, B. P. Zakharchenya and E. M. Leonov. 14(9), 2312–4 (Mar. 1973); CPM-7303E1136

Influence of Internal Stresses on Magnetic Birefringence of Yttrium Ferrite Garnet (E)—V. A. Babko and V. D. Tron'ko. 14(9), 2426–7(C) (Mar. 1973); CPM-7303E1250

Optical Properties of $FeBO_3$ in the Strong Absorption Region (E)—I. S. Edel'man, A. V. Malakhovskii, T. I. Vasil'eva and V. N. Seleznev. 14(9), 2442–4(C) (Mar. 1973); CPM-7303E1266

Propagation of Electromagnetic Waves in Ferromagnetic Metals with p-Type Conductivity (T)—L. M. Gorenko and R. G. Khlebopros. 14(11), 2694–5 (May 1973); CPM-7305D0922

Selective Transparency of Ferromagnetic Metal Plates near Antiresonance (T)—M. I. Kaganov and A. S. Mikhailov. 14(11), 2748–50 (May 1973); CPM-7305D0976

Faraday Effect in the Region of the Intrinsic Absorption Edge in CdSe (E)—V. V. Mussil, V. V. Karmazin and V. K. Miloslavskii. 14(12), 3004–7 (Jun. 1973); CPM-7306D0846

Raman–Nath Scattering of Light by Magnetostatic Waves (E)—N. N. Kiryukhin, I. N. Kotel'nikov and F. V. Lisovskii. 14(12), 3087–8 (C) (Jun. 1973); CPM-7306D0929

5.60.45. Infrared and Raman Spectra and Scattering in Solids

5.60.45.10. General Theory and Measurement Techniques

Surface Excitons and their Effect on Optical Properties of Crystals (T)—V. I. Sugakov. 14(7), 1711–7 (Jan. 1973); CPM-7301C0671

Dependence of the Raman Scattering Tensor on the Frequency of Incident Light in the Presence of Intermolecular Vibrations (T)—L. N. Ovander. 14(9), 2380–1(C) (Mar. 1973); CPM-7303E1204

Determination of the Effective Charge of Ions from the Spectra of the Raman Scattering of Light by Polaritons (T/E)—Yu. G. Sindeev. 14(12), 3110–1(C) (Jun. 1973); CPM-7306D0952

5.60.45.20. Infrared and Raman Spectra in Metals

Optical Absorption in Tungsten at T=77°K (E)—L. V. Nomerovannaya, M. M. Kirillova and M. M. Noskov. 14(2), 541–2(C) (Aug. 1972); CPM-7208E0698

5.60.45.40. Infrared and Raman Spectra in Inorganic Semiconductors

Effect of Crystal Lattice Disorder on the Vibrational Spectrum and the Optical States of $CdGeP_2$ (E)—Yu. F. Markov and N. B. Reshetnyak. 14(1), 37–40 (Jul. 1972); CPM-7207D0996

Spectrum of Co^{2+} Ion in ZnS–Co and Al Crystals Grown from the Melt (E)—A. I. Ryskin, L. A. Sysoev and G. I. Khil'ko. 14(3), 779–80(C) (Sep. 1972); CPM-7209D0213

Combination Scattering Spectra of Crystalline and Vitreous As_2S_3 (E)—Yu. F. Markov and N. B. Reshetnyak. 14(4), 1063–5(C) (Oct. 1972); CPM-7210D0878

Reflection and Absorption of InSe Crystals in the IR Region of the Spectrum (E)—V. P. Mushinskii and V. I. Kobolev. 14(4), 1098–100(C) (Oct. 1972); CPM-7210D0913

Intrinsic Absorption and Thermal Properties of Stibiotantalite (E/T)—V. K. Novik, N. F. Karyakina and V. A. Timoshenkov. 14(5), 1288–90 (Nov. 1972); CPM-7211A1540

Optical–Phonon Spectrum of the Antiferromagnetic Semiconductor MnTe (E)—L. V. Povstyanyi, V. I. Kut'ko and A. I. Zvyagin. 14(5), 1346–7(C) (Nov. 1972); CPM-7211A1598

Plasmon–Phonon Interaction in Gallium Antimonide (T/E)—N. V. Bozhovskaya and V. K. Subashiev. 14(7), 1627–33 (Jan. 1973); CPM-7301C0587

Additional Lattice Absorption Bands in SiC Polytypes (E)—G. B. Dubrovskii and E. I. Radovanova. 14(8), 2127–8(C) (Feb. 1973); CPM-7302E1253

Optical Phonons in Amorphous Films of Arsenic Chalcogenides (E)—V. P. Zakharov, V. S. Gerasimenko and L. P. Kucherenko. 14(8), 2138–9(C) (Feb. 1973); CPM-7302E1264

Absorption Bands of SiC–4H in the Far Infrared (E)—M. A. Il'in and E. P. Rashevskaya. 14(8), 2148–9(C) (Feb. 1973); CPM-7302E1274

Nonlinear Absorption of IR Radiation in Indium Antimonide (E/T)—A. M. Danishevskii, S. F. Kochegarov and V. K. Subashiev. 14(11), 2754–8 (May 1973); CPM-7305D0982

Temperature Dependence of Infrared Dispersion of Lattice Reflection in GaSb (E/T)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(11), 2838–40 (May 1973); CPM-7305D1066

Infrared Absorption in α SiC(6H) Activated by Ultraviolet Background Illumination (E)—O. V. Vakulenko and O. A. Govorova. 14(12), 2939–41 (Jun. 1973); CPM-7306D0781

Multiphonon Absorption in Gallium Antimonide (E)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(12), 3041–3 (Jun. 1973); CPM-7306D0883

5.60.45.50. Infrared and Raman Spectra in Other Inorganic Crystals

Optical Properties of V_2O_3 in the Region of the Phase Transition (E/T)—M. S. Kozyreva, V. N. Novikov and B. A. Tallerchik. 14(3), 639–43 (Sep. 1972); CPM-7209D0073

Infrared Absorption of SO_4^{2-}, CrO_4^{2-}, and SeO_4^{2-} Impurity Ions in a CsI Crystal (E)—Yu. P. Tsyashchenko and V. P. Dem'yanenko. 14(3), 791–3(C) (Sep. 1972); CPM-7209D0225

Scattering of Light by Optical Phonons in $Bi_{12}SiO_{20}$ Crystals (E)—B. Kh. Bairamov, I. S. Rez, Z. M. Khashkhozhev and V. I. Tsanev. 14(6), 1473–6 (Dec. 1972); CPM-7212D0809

Raman Spectra of the Ferroelectric Modification of a KH_2PO_4 (KDP) Crystal (E)—E. A. Popova. 14(7), 1678–80 (Jan. 1973); CPM-7301C0638

Two–Phonon Absorption in BiOI, BiOBr, and BiOCl Single Crystals (E/T)—G. D. Puga, A. N. Borets, D. M. Bercha and M. V. Shtilikha. 14(7), 1830–1(C) (Jan. 1973); CPM-7301C0790

Raman Scattering of Light in Antiferromagnetic Siderite (E)—Yu. A. Popkov, V. V. Eremenko, V. I. Fomin and A. P. Mokhir. 14(8), 1985–9 (Feb. 1973); CPM-7302E1111

Spin–Lattice Relaxation of Co^{2+} Ions in $Na_2Zn(SO_4)_2 \cdot 4H_2O$ and $Na_2Cd(SO_4)_2 \cdot 2H_2O$ Single Crystals (E)—R. S. Tukhvatullin, A. A. Fedii and Yu. K. Chirkin. 14(11), 2896–7(C) (May 1973); CPM-7305D1124

Far–Infrared Absorption Spectrum of Antiferromagnetic Nickel Tungstate (E)—V. I. Kut'ko, V. M. Naumenko and A. I. Zvyagin. 14(11), 2900–1(C) (May 1973); CPM-7305D1128

5.60.45.70. Infrared and Raman Spectra in Organic Crystals

Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskis, E. I. Balabanov and A. I. Vasil'ev. 14(12), 3028–31 (Jun. 1973); CPM-7306D0870

5.60.50. Visible and Ultraviolet Spectra in Solids

5.60.50.10. General Theory

Surface Excitons and their Effect on Optical Properties of Crystals (T)—V. I. Sugakov. 14(7), 1711–7 (Jan. 1973); CPM-7301C0671

5.60.50.20. Ionic Crystals

Electron–Microscope Detection and Optical Investigation of Exciton Decay Products in KBr Crystals (E/T)—Kh. R.–V. Iygi, Ch. B. Lushchik, A. F. Malysheva and E. S. Tiisler. 14(1), 95–100 (Jul. 1972); CPM-7207D1054

Effect of Magnetic Ordering on the Formation of the Optical Absorption Spectrum of Yttrium Iron Garnet (E/T)—A. V. Antonov and A. I. Belyaeva. 14(4), 876–80 (Oct. 1972); CPM-7210D0691

Structure and Conversion of Hole Centers in KCl(NaCl) Crystals (E)—P. K. Gorbenko and A. A. Kovtun. 14(4), 1046–7(C) (Oct. 1972); CPM-7210D0861

Absorption and Luminescence Spectra of Red Lead Monoxide (E)—V. A. Gaisin, L. Nanai and D. S. Nedzvetskii. 14(9), 2378–9(C) (Mar. 1973); CPM-7303E1202

Effect of Uniaxial Deformation on the Absorption Spectrum of Bismuth Iodide Crystals (E)—E. F. Gross, D. L. Fedorov and R. I. Shekhmamet'ev. 14(11), 2767–9 (May 1973); CPM-7305D0995

Absorption Spectra and Optical Transitions in AsI_3 Single Crystals (E)—V. I. Vashchenko, V. N. Kołosyuk and G. A. Vashchenko. 14(12), 3068–70 (Jun. 1973); CPM-7306D0910

5.60.50.30. Semiconductors

Forbidden Indirect Transitions in Germanium Subjected to a Magnetic Field (E)—V. I. Zemskii. 14(1), 217–8(C) (Jul. 1972); CPM-7207D1176

Optical Phonons in a System of $Zn_xCd_{1-x}Te$ Mixed Crystals (E)—L. K. Vodop'yanov, E. A. Vinogradov, A. M. Blinov and V. A. Rukavishnikov. 14(1), 219–20(C) (Jul. 1972); CPM-7207D1178
Excitation of Exciton States in ZnS Crystals Containing Stacking Faults (E)—L. G. Suslina and E. B. Shadrin. 14(1), 243–4(C) (Jul. 1972); CPM-7207D1202
Form of Exciton Absorption Bands of CdS Single Crystals at T=4.2°K (E)—M. I. Strashnikova and A. T. Rudchik. 14(4), 845–8 (Oct. 1972); CPM-7210D0660
Stark Effect and Charge-Transfer States in Organic Semiconductors (E)—L. M. Blinov and N. A. Kirichenko. 14(8), 2163–4(C) (Feb. 1973); CPM-7302E1289
Photoionization Spectra of Impurity Centers in α SiC(6H) at High Temperatures (E)—I. S. Gorban', V. P. Zavada and A. S. Skirda. 14(10), 2652–3(C) (Apr. 1973); CPM-7304E1298
Long-Wavelength Fundamental Absorption Edge of $CdSiP_2$ Crystals (E)—I. S. Gorban', V. V. Lugovskii and V. P. Radzivil. 14(12), 3089–90(C) (Jun. 1973); CPM-7306D0931

5.60.50.40. Metals, Semimetals and Alloys

Optical Absorption in Tungsten at T=77°K (E)—L. V. Nomerovannaya, M. M. Kirillova and M. M. Noskov. 14(2), 541–2(C) (Aug. 1972); CPM-7208E0698
Optical Properties of Copper–Nickel Alloys in the Visible and Ultraviolet Regions of the Spectrum (E)—I. I. Sasovskaya and M. M. Noskov. 14(4), 857–9 (Oct. 1972); CPM-7210D0672

5.60.50.90. Other Materials

Exciton States in a Fluorobenzene Crystal (E)—G. V. Klimusheva and G. M. Soroka. 14(3), 794–5(C) (Sep. 1972); CPM-7209D0228
Anomalous Behavior of the Optical Absorption Coefficient of Lead Magnoniobate Single Crystals in the Region of a Broad Ferroelectric Transition (E)—L. S. Kamzina, N. N. Krainik and N. N. Nesterova. 14(7), 1853–5(C) (Jan. 1973); CPM-7301C0813
Optical Properties of $FeBO_3$ in the Strong Absorption Region (E)—I. S. Édel'man, A. V. Malakhovskii, T. I. Vasil'eva and V. N. Seleznev. 14(9), 2442–4(C) (Mar. 1973); CPM-7303E1266
Absorption and Luminescence Spectra of Diamond Crystals in the Red Region of the Spectrum (E/T)—D. S. Nedzvetskii and V. A. Gaisin. 14(10), 2535–8 (Apr. 1973); CPM-7304E1181

5.60.60. Impurity and Defect Absorption in Solids

5.60.60.10. General Theory

Spectral Theory of the Transfer of Excitations in a System of Two-Level Centers (T)—V. S. Mashkevich and E. A. Shadchin. 14(3), 716–9 (Sep. 1972); CPM-7209D0150
Profile of the Optical Absorption and Luminescence Bands in Systems Exhibiting the Renner Effect (T)—V. P. Khlopin, B. S. Tsukerblat, Yu. B. Rozenfel'd and I. B. Bersuker. 14(4), 908–14 (Oct. 1972); CPM-7210D0723
Impurity Absorption of Light in a Strong Electric Field below the Absorption Edge (T)—S. F. Timashev. 14(9), 2267–9 (Mar. 1973); CPM-7303E1091

5.60.60.20. Ionic Crystals

Structure of the Absorption Bands of Quasimetallic Centers in Alkali Halide Crystals (E)—V. V. Golubtsov and B. N. Khlopkov. 14(1), 232–3(C) (Jul. 1972); CPM-7207D1191
Conversion of Molecular CO_3^{2-} Centers in KCl and KBr Single Crystal Presurface Layers (E)—N. G. Politov and B. M. Trakhbrot. 14(2), 483–4(C) (Aug. 1972); CPM-7208E0640
Mechanism of Radiation-Induced Coloring of KCl:Ag Crystals (E/T)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(3), 753–6 (Sep. 1972); CPM-7209D0187
Infrared Absorption of SO_4^{2-}, CrO_4^{2-}, and SeO_4^{2-} Impurity Ions in a CaI Crystal (E)—Yu. P. Tsyashchenko and V. P. Dem'yanenko. 14(3), 791–3(C) (Sep. 1972); CPM-7209D0225
Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654
Structure and Conversion of Hole Centers in KCl(NaCl) Crystals (E)—P. K. Gorbenko and A. A. Kovtun. 14(4), 1046–7(C) (Oct. 1972); CPM-7210D0861
Investigation of Silver Atoms in Mixed Alkali Halide Crystals (E)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(6), 1488–92 (Dec. 1972); CPM-7212D0824
Impurity Centers in NH_4Cl Crystals Activated with Iron Group Ions (E/T)—A. L. Stolov and Zh. S. Yakovleva. 14(7), 1810–2 (Jan. 1973); CPM-7301C0770
Optical Delocalization of Holes from Tl^{2+} Centers in KCl:Tl (E)—V. S. Oaminin. 14(8), 1996–2001 (Feb. 1973); CPM-7302E1122

5.60.60.30. Semiconductors

Interaction of Excitons with Phonons in Benzene Crystals (E)—V. L. Broude and V. K. Dolganov. 14(1), 225–7(C) (Jul. 1972); CPM-7207D1184
Impurity Absorption of Infrared Radiation in n-Type SiC(6H) (E)—O. V. Vakulenko, O. A. Govorova and B. M. Shutov. 14(1), 242 (C) (Jul. 1972); CPM-7207D1201
Anomalous Intensity of Exciton–Impurity Absorption in CdS Crystals (E)—V. B. Timofeev and T. N. Yalovets. 14(2), 399–403 (Aug. 1972); CPM-7208E0556
Impurity Absorption Spectra of Silicon Carbide in the Near Infrared Region (E)—I. S. Gorban', Yu. A. Marazuev and A. S. Skirda. 14(3), 664–7 (Sep. 1972); CPM-7209D0098
Possibility of Fermi Resonance between a Local Impurity Vibration and the Vibrations of the Host Lattice of a Crystal (E/T)—M. Ya Valakh, M. P. Lisitsa, N. E. Novoseletskii and A. M. Yaremko. 14(3), 702–5 (Sep. 1972); CPM-7209D0136
Spectrum of Co^{2+} Ion in ZnS–Co and Al Crystals Grown from the Melt (E)—A. I. Ryskin, L. A. Sysoev and G. I. Khil'ko. 14(3), 779–80(C) (Sep. 1972); CPM-7209D0213
Photoionization Spectra of Impurity Centers in α SiC(6H) at High Temperatures (E)—I. S. Gorban', V. P. Zavada and A. S. Skirda. 14(10), 2652–3(C) (Apr. 1973); CPM-7304E1298
Infrared Absorption in α SiC(6H) Activated by Ultraviolet Background Illumination (E)—O. V. Vakulenko and O. A. Govorova. 14(12), 2939–41 (Jun. 1973); CPM-7306D0781
Dislocation-Induced Anisotropic Absorption of Polarized Light in Cadmium Sulfide (E)—N. V. Klassen and Yu. A. Osip'yan. 14(12), 3094–5(C) (Jun. 1973); CPM-7306D0936

5.60.60.90. Other Materials

Absorption and Luminescence Spectra of Diamond Crystals in the Red Region of the Spectrum (E/T)—D. S. Nedzvetskii and V. A. Gaisin. 14(10), 2535–8 (Apr. 1973); CPM-7304E1181

5.60.70. Luminescence and Radiative Recombination in Solids

5.60.70.10. General Theory and Measurement Techniques

Recombination Radiation from High-Density Exciton Systems in Silicon (E)—B. M. Ashkinadze and T. Risbaev. 14(3), 596–601 (Sep. 1972); CPM-7209D0030
Profile of the Optical Absorption and Luminescence Bands in Systems Exhibiting the Renner Effect (T)—V. P. Khlopin, B. S. Tsukerblat, Yu. B. Rozenfel'd and I. B. Bersuker. 14(4), 908–14 (Oct. 1972); CPM-7210D0723
Surface Excitons and their Effect on Optical Properties of Crystals (T)—V. I. Sugakov. 14(7), 1711–7 (Jan. 1973); CPM-7301C0671

5.60.70.20. Photoluminescence, Fluorescence and Phosphorescence

Influence of Channeling on the Scintillation Efficiency of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(1), 209–10(C) (Jul. 1972); CPM-7207D1168
Luminescence of Single Crystals of the Ferroelectric Semiconductor SbSI (E)—M. K. Sheinkman, N. M. Krolevets, E. A. Savchenko and L. N. Tatarenko. 14(1), 253–4(C) (Jul. 1972); CPM-7207D1212
Bound Exciton Luminescence in Germanium Crystals (E)—E. F. Gross, B. V. Novikov and N. S. Sokolov. 14(2), 368–71 (Aug. 1972); CPM-7208E0525
Recombination Radiation Involving Participation of Isoelectronic Centers in Antimony-Doped Gallium Phosphide (E)—D. S. Nedzvetskii, S. I. Radautsan and Yu. I. Maksimov. 14(2), 551–3 (C) (Aug. 1972); CPM-7208E0708

Exciton States in a Fluorobenzene Crystal (E)—G. V. Klimusheva and G. M. Soroka. 14(3), 794–5(C) (Sep. 1972); CPM-7209D0228
Recombination and Capture Probabilities in Potassium Iodide–Thallium Crystals (E)—E. F. Martynovich, I. A. Parfianovich and Yu. B. Nemirovskii. 14(4), 1061–2(C) (Oct. 1972); CPM-7210D0876
Luminescence Centers in NaF–Eu^{3+} Crystals (E)—G. D. Potapenko and V. F. Pisarenko. 14(5), 1169–72 (Nov. 1972); CPM-7211A1421
Many-Photon Excitation and Ionization of Tl^+ Impurity Centers in Alkali Halide Crystals (T/E)—G. I. Aseev and M. L. Kats. 14(5), 1173–6 (Nov. 1972); CPM-7211A1425
Spectroscopic Observation of the Lifetime of Free Excitons (T/E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1193–8 (Nov. 1972); CPM-7211A1445
Circular Polarization of Recombination Light of Semiconductors in a Weak Magnetic Field (T)—M. I. D'yakonov and V. I. Perel'. 14(5), 1245–50 (Nov. 1972); CPM-7211A1497
Kinetics of Bound–Exciton Formation in CdS Crystals (E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1331–2(C) (Nov. 1972); CPM-7211A1583
Broadening, Profile, and Shift of Phononless Lines in the Spectra of Impure n–Paraffin Crystals Recorded in the 4.2–77°K Range (E)—E. I. Al'shits, É. D. Godyaev and R. I. Personov. 14(6), 1385–92 (Dec. 1972); CPM-7212D0721
Surface Influence on the Optical Orientation of Electron Spins in Semiconductors (E)—D. Z. Garbuzov, R. I. Dzhioev, L. M. Kanskaya and V. G. Fleisher. 14(6), 1481–7 (Dec. 1972); CPM-7212D0817
Exciton Energy Spectra in Crystals of the Diamond and Sphalerite Types (T)—S. M. Zubkova and K. B. Tolpygo. 14(6), 1514–7 (Dec. 1972); CPM-7212D0850
Zero-Phonon Radiative Annihilation of Indirect Excitons in Germanium Crystals with Isoelectronic Substitutional Impurities (T)—E. F. Gross, N. S. Sokolov and A. N. Titkov. 14(7), 1732–4 (Jan. 1973); CPM-7301C0692
Recombination Luminescence in the Crystals $Y_3Al_5O_{12}$–TR_1, TR_2 (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker and V. V. Osiko. 14(7), 1820–2 (Jan. 1973); CPM-7301C0780
Temperature Broadening and Shift of Phononless Lines in Luminescence Spectra of Crystals of Uranyl Compounds (E/T)—R. N. Shchelokov, Yu. I. Krasilov and V. E. Karasev. 14(7), 1885–6(C) (Jan. 1973); CPM-7301C0845
Kinetics of Energy Transfer in a Crystal (T)—V. P. Sakun. 14(8), 1906–14 (Feb. 1973); CPM-7302E1032
Spectrum of Nonisolated Donor–Acceptor Pairs in Hexagonal Silicon Carbide (E)—I. S. Gorban', V. A. Gubanov and V. M. Efimov. 14(8), 2010–4 (Feb. 1973); CPM-7302E1136
Carrier Recombination in GaAs when Carriers are Generated in the Vicinity of the Surface (E/T)—G. P. Peka and L. G. Shepel'. 14(8), 2025–30 (Feb. 1973); CPM-7302E1151
Optical Orientation of Excitons and the Hanley Effect in Gallium Selenide (E)—Yu. P. Veshchunov, B. P. Zakharchenya and E. M. Leonov. 14(9), 2312–4 (Mar. 1973); CPM-7303E1136
Absorption and Luminescence Spectra of Red Lead Monoxide (E)—V. A. Gaisin, L. Nanai and D. S. Nedzvetskii. 14(9), 2378–9(C) (Mar. 1973); CPM-7303E1202
Absorption and Luminescence Spectra of Diamond Crystals in the Red Region of the Spectrum (E/T)—D. S. Nedzvetskii and V. A. Gaisin. 14(10), 2535–8 (Apr. 1973); CPM-7304E1181
Summation of Electron Excitations in Fluorite–Type Crystals Activated by Er^{3+} Ions (T)—V. B. Kirii and V. L. Shekhtman. 14(10), 2559–63 (Apr. 1973); CPM-7304E1205
Upper Branch of Ordinary Polaritons in an $LiNbO_3$ Crystal (E/T)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(10), 2611(C) (Apr. 1973); CPM-7304E1257
Effect of the Indirect Exchange Interaction on the Crystal Field Parameters of Rhombic Er^{3+} Centers in Fluorite Crystals (T/E)—I. B. Aizenberg, M. D. Davydova and A. L. Stolov. 14(11), 2710–2 (May 1973); CPM-7305D0938
Some Features of Hexagonal Boron Nitride (E)—M. B. Khusidman. 14(11), 2791–3 (May 1973); CPM-7305D1019
Effect of Band Structure on the Recombination Mechanism of Condensed Charge Carriers in Germanium, Silicon, and Their Alloys (E/T)—Ya. E. Pokrovskii, K. I. Svistunova and N. V. Alkeev. 14(11), 2805–7 (May 1973); CPM-7305D1033
Impurity Recombination Radiation Excited in GaAs by Strongly Absorbed Radiation (E/T)—G. P. Peka, N. L. Dmitruk and L. G. Shepel'. 14(11), 2866–9 (May 1973); CPM-7305D1094
Energy of Formation of Biexcitons in Silicon (E)—V. M. Asnin, Yu. N. Lomasov and A. A. Rogachev. 14(11), 2921–2(C) (May 1973); CPM-7305D1149
Luminescence Kinetics of Free and Bound Excitons in CdS Crystals (E)—V. L. Broude, I. I. Tartakovskii and V. B. Timofeev. 14(12), 2971–6 (Jun. 1973); CPM-7306D0813
Effects of Spatial Dispersion in the Reflection Spectra of Crystals Obtained for Oblique Incidence of Light (T/E)—S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(12), 3051–6 (Jun. 1973); CPM-7306D0893
Tunnel Ionization of Excited In^+ Centers in KCl:In (E)—V. I. Leiman. 14(12), 3057–60 (Jun. 1973); CPM-7306D0899

5.60.70.30. Electroluminescence and Electrophotoluminescence

Influence of Structure Defects on the Electrical Properties and Luminescence of α–SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206
Formation of Luminescence Centers in Nonactivated Alkali Halide Crystals in Very Strong Electric Fields (E)—N. I. Lebedeva and N. S. Nesmelov. 14(4), 1106–7(C) (Oct. 1972); CPM-7210D0921

5.60.70.40. Other Excitation Mechanisms

Light Emission from $BaTiO_3$ Crystals Subjected to Uniaxial Stress Pulses (E)—S. A. Flerova and Yu. I. Samchenko. 14(2), 498–9(C) (Aug. 1972); CPM-7208E0655
Magnetic Properties of Tl^{2+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682
Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654
Deformation Luminescence of KCl.Ag Crystals (E)—I. A. Markova–Osorgina, F. D. Senchukov and S. Z. Shmurak. 14(5), 1236–8 (Nov. 1972); CPM-7211A1488
Flashes of Luminescence on Unloading Plastically Deformed Alkali Halide Crystals (E)—F. D. Senchukov and S. Z. Shmurak. 14(5), 1336–7(C) (Nov. 1972); CPM-7211A1588
Recombination Luminescence in the Crystals $Y_3Al_5O_{12}$–TR_1, TR_2 (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker and V. V. Osiko. 14(7), 1820–2 (Jan. 1973); CPM-7301C0780
Influence of an Electric Field on the Parameters of Impurity Centers in Al_2O_3 (E)—V. V. Mikho, A. P. Fedchuk and L. M. Stambol'skaya. 14(10), 2665–6(C) (Apr. 1973); CPM-7304E1311

5.60.70.50. Effects of Various Parameters and Quenching

Method of Changing and Controlling Optical Properties of Photosemiconductors (T)—R. G. Maev, I. A. Poluéktov and V. I. Pustovoit. 14(7), 1738–44 (Jan. 1973); CPM-7301C0698

5.60.80. Photoconductivity and Photovoltaic Effects

Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634
Quantum Yield of the Internal Photoelectric Effect and Impact Ionization in PbS (E/T)—V. N. Ivakhno. 14(2), 481–2(C) (Aug. 1972); CPM-7208E0638
Photoconductivity of Yttrium Ferrite Garnet (E)—V. V. Eremenko, A. P. Kirichenko, V. N. Rubtsov and V. S. Smirnov. 14(4), 1057–8 (Oct. 1972); CPM-7210D0872
Negative Photoconductivity in Semiconductors (T)—Yu. G. Bachinin and Yu. V. Gulyaev. 14(4), 1092–3(C) (Oct. 1972); CPM-7210D0907
Many-Photon Excitation and Ionization of Tl^+ Impurity Centers in Alkali Halide Crystals (T/E)—G. I. Aseev and M. L. Kats. 14(5), 1173–6 (Nov. 1972); CPM-7211A1425
Temperature Dependence of the Photoconductivity Spectrum of Anthracene (E/T)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(5), 1241–4 (Nov. 1972); CPM-7211A1493

Photoconductivity of Al_2O_3 in the Region near the Intrinsic Absorption Edge (E)—É. R. Il'mas and A. I. Kuznetsov. 14(5), 1255–8 (Nov. 1972); CPM-7211A1507

β Modification of In_2Te_3 (E)—I. Yu. Verkelis. 14(6), 1445–7 (Dec. 1972); CPM-7212D0781

Electron Excitations Resulting from Photoionization of an LiF Crystal (E)—A. V. Ivanov. 14(6), 1601–2(C) (Dec. 1972); CPM-7212D0937

Exciton Spectrum of Photoconductivity in Zinc Sulfide Crystals (E)—A. V. Il'inskii, B. V. Novikov, L. G. Suslina and E. B. Shadrin. 14(7), 1673–7 (Jan. 1973); CPM-7301C0633

Method of Changing and Controlling Optical Properties of Photosemiconductors (T)—R. G. Maev, I. A. Poluéktov and V. I. Pustovoit. 14(7), 1738–44 (Jan. 1973); CPM-7301C0698

Photoconductivity of Semiconductors in Strong Magnetic Fields (T)—A. D. Malov and V. I. Ryzhii. 14(7), 1766–9 (Jan. 1973); CPM-7301C0726

Fluctuations of Hot Photoelectrons in Semiconductors (T)—L. Ya. Kashchenevskii and I. M. Yakover. 14(8), 1953–5 (Feb. 1973); CPM-7302E1079

Photovoltaic Effect in Anthracene Crystals (E)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(8), 2035–9 (Feb. 1973); CPM-7302E1161

Quantum Efficiency in Semiconductors with Kane-Type Band Structure (T)—N. S. Baryshev, K. Ya. Shtivel'man and M. P. Shchetinin. 14(9), 2344–7 (Mar. 1973); CPM-7303E1168

Electrically Stimulated Inversion of Photoconductivity in a Heterojunction Containing Color Centers (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(11), 2860–2 (May 1973); CPM-7305D1088

5.60.90. Other Optical Properties of Solids

Spectral Reversal of Dichroism in Silver Halides (E)—V. P. Cherkashin. 14(4), 1083–4(C) (Oct. 1972); CPM-7210D0898

Absorption of Light by Bound Excitons in Semiconductors (T)—V. A. Andreev and V. I. Sugakov. 14(5), 1338–9(C) (Nov. 1972); CPM-7211A1590

Effect of an Electromagnetic Field on Ionization by Collision (T)—V. N. Strekalov. 14(5), 1348–9(C) (Nov. 1972); CPM-7211A1600

Method of Changing and Controlling Optical Properties of Photosemiconductors (T)—R. G. Maev, I. A. Poluéktov and V. I. Pustovoit. 14(7), 1738–44 (Jan. 1973); CPM-7301C0698

Interaction of Neutrons and Light with Magnetoacoustic Waves in Crystals Having a Ferromagnetic–Antiferromagnetic Transition (T)—A. É. Ginzburg, L. N. Davydov and Z. A. Spol'nik. 14(7), 1774–8 (Jan. 1973); CPM-7301C0734

Effect of Inelastic Interaction of Carriers on the Absorption of Light in Semiconductors (T)—G. K. Vlasov. 14(7), 1794–800 (Jan. 1973); CPM-7301C0754

Stimulated Antiresonance in Crystals (T)—E. Yu. Perlin. 14(7), 1837–8(C) (Jan. 1973); CPM-7301C0797

Photodomain Effect and Deformation in SbSI Single Crystals (E)—A. A. Grekov, R. E. Pasynkov and E. D. Rogach. 14(8), 1919–21 (Feb. 1973); CPM-7302E1045

Weak Turbulence of Coupled Longitudinal Waves in Semiconductors with Ionic Lattices (T)—E. A. Rubinshtein. 14(8), 2002–5 (Feb. 1973); CPM-7302E1128

Optical Properties of Quasi-One-Dimensional and Quasi-Two-Dimensional Crystals (T)—L. N. Bulaevskii and Yu. A. Kukharenko. 14(8), 2076–80 (Feb. 1973); CPM-7302E1202

Pleochroism in SbSI Associated with the Domain Structure (E)—A. Kh. Zeinally, A. M. Mamedov and Sh. M. Efendiev. 14(8), 2106–7 (C) (Feb. 1973); CPM-7302E1232

Joint Matrix Element for Two-Photon Interband Transitions in Semiconductors (T)—P. M. Mednis. 14(9), 2195–7 (Mar. 1973); CPM-7303E1019

Thermal Broadening and Shift of Phononless Impurity Optical Lines (T)—I. S. Osad'ko. 14(10), 2522–6 (Apr. 1973); CPM-7304E1168

Periodic Dichroism of Colored Alkali Halide Crystals Introduced by Plastic Deformation (E)—V. M. Bezruchko. 14(10), 2527–30 (Apr. 1973); CPM-7304E1173

Optical Excitation of Plane-Polarized Waves and Structures (T)—I. V. Ioffe and L. F. Mezrina. 14(10), 2619(C) (Apr. 1973); CPM-7304E1265

Two-Photon Absorption in Superconductors (T)—V. M. Genkin and G. M. Genkin. 14(11), 2732–6 (May 1973); CPM-7305D0960

Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Light Absorption by Free Carriers Due to Interactions between Them (T)—G. K. Vlasov, V. S. Mashkevich and E. A. Timonina. 14(11), 2870–4 (May 1973); CPM-7305D1098

5.70. PASSAGE OF PARTICLES AND RADIATION THROUGH SOLIDS

5.70.10. General Theory and Measurement Techniques

Coupled Electromagnetic–Magnon Waves and Scattering of Particles in Antiferromagnetic Metals (T)—E. M. Chudnovskii. 14(4), 1035–9 (Oct. 1972); CPM-7210D0850

5.70.15. Radiowave and Microwave Interactions in Solids (Excluding Resonances)

Feasibility of Suppression of Gunn Domains (T)—S. N. Artemenko, R. F. Kazarinov and R. A. Suris. 14(6), 1393–9 (Dec. 1972); CPM-7212D0729

5.70.20. X-Ray Interactions with Solids

5.70.20.20. Dynamical X-Ray Diffraction and Scattering

Anomalous Transmission of X Rays by Silicon Single Crystals Containing Dislocations (E)—É. G. Sheikhet, O. N. Efimov and N. V. Veselovskaya. 14(1), 223–4(C) (Jul. 1972); CPM-7207D1182

Anomalous Reflection of X Rays (T/E)—B. M. Rovinskii, V. M. Sinaiskii and V. I. Sidenko. 14(2), 340–3 (Aug. 1972); CPM-7208E0497

Kinetics of the Formation of Submicroscopic Cracks in Polymers Under Load (E)—M. A. Gezalov, V. S. Kuksenko and A. I. Slutsker. 14(2), 344–8 (Aug. 1972); CPM-7208E0501

Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

Photoelectric Absorption and Diffuse Scattering in the Anomalous Transmission of X Rays in Ge Crystals (T)—É. G. Sheikhet and O. N. Efimov. 14(3), 625–7 (Sep. 1972); CPM-7209D0059

Slip Polygonization in Silicon Iron Single Crystals Deformed by Tensile Forces (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(4), 1075–6(C) (Oct. 1972); CPM-7210D0890

Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

X-Ray Diffraction Study of Local Order in the MgO—ZnO System (E)—S. A. Chudinova and O. N. Shivrin. 14(5), 1297–301 (Nov. 1972); CPM-7211A1549

Experimental Investigation and Calculation of the X-Ray Diffraction Contrast of a Single Dislocation (E/T)—V. I. Polovinkina, É. V. Suvorov, F. N. Chukhovskii and A. A. Shmol'berg. 14(7), 1699–702 (Jan. 1973); CPM-7301C0659

X-Ray Diffraction Investigation of the Substructure of Iron Microcrystals (E)—I. P. Kushnir and E. F. Sidokhin. 14(8), 2129–30(C) (Feb. 1973); CPM-7302E1255

Diffuse Scattering of X Rays by Polycrystalline Aggregates Containing Dislocation Loops of Small Radius (T)—I. A. Malinenko and O. N. Shivrin. 14(10), 2599–600 (Apr. 1973); CPM-7304E1245

Observation of the Domain Structure in KDP by Low-Temperature X-Ray Photography Using a Widely Diverging Beam (E)—V. Sh. Shekhtman, L. G. Shabel'nikov, I. M. Shmyt'ko and S. Kh. Aknazarov. 14(11), 2690–3 (May 1973); CPM-7305D0918

Intensities of X-Ray Reflections from the Basal Plane in Silicon Carbide (E)—R. N. Kyutt and A. S. Tregubova. 14(12), 3008–11 (Jun. 1973); CPM-7306D0850

5.70.20.30. X-Ray Absorption and Absorption Edges

Photoelectric Absorption and Diffuse Scattering in the Anomalous Transmission of X Rays in Ge Crystals (T)—É. G. Sheikhet and O. N. Efimov. 14(3), 625–7 (Sep. 1972); CPM-7209D0059

Effect of Dislocations on the Anomalous Transmission of X Rays in Zn and KCl Crystals (E)—É. F. Chaikovskii and L. B. Zagarii. 14 (5), 1340–1(C) (Nov. 1972); CPM-7211A1592

Some Features of Hexagonal Boron Nitride (E)—M. B. Khusidman. 14(11), 2791–3 (May 1973); CPM-7305D1019

5.70.20.40. X-Ray Emission Threshold and Fluorescence Spectra

X-Ray Spectroscopic Investigation of Iron Germanides (E)—V. V. Nemoshkalenko, V. Ya. Nagornyi and L. I. Nikolaev. 14(7), 1835–6(C) (Jan. 1973); CPM-7301C0795

Experimental Confirmation of Certain Many-Electron Processes (E)—M. A. Blokhin, E. G. Orlova and I. G. Shveitser. 14(8), 2146–7(C) (Feb. 1973); CPM-7302E1272

New X-Ray Emission Bands of Sn, Sc, Re, and Os in the Wavelength Range 90–900 Å (E)—A. S. Shulakov, V. A. Fomichev and T. M. Zimkina. 14(10), 2644–5(C) (Apr. 1973); CPM-7304E1290

Some Features of Hexagonal Boron Nitride (E)—M. B. Khusidman. 14(11), 2791–3 (May 1973); CPM-7305D1019

5.70.20.90. Other Topics on X-Ray Interactions with Solids

Origin of Oriented Maxima in the Bremsstrahlung Spectra of Nonrelativistic Electrons in a Single Crystal (T)—N. P. Kalashnikov, É. A. Koptelov and M. I. Ryazanov. 14(4), 1033–4 (Oct. 1972); CPM-7210D0848

X-Ray Induced Electron Emission from Perfect Germanium Single Crystals Under (111) Bragg Reflection Conditions (E)—V. N. Shchemelev and M. V. Kruglov. 14(12), 2988–91 (Jun. 1973); CPM-7306D0830

5.70.30. Mössbauer Effect

Effective Magnetic Fields at Sn^{119} Nuclei in Some Magnetically Ordered Perovskites (E)—V. A. Bokov, G. V. Popov, N. N. Parfenova and G. G. Yushina. 14(1), 83–6 (Jul. 1972); CPM-7207D1042

"Magnetic Anomalies" in the Mössbauer Effect (T)—V. M. Belova and V. I. Nikolaev. 14(1), 111–6 (Jul. 1972); CPM-7207D1070

Effect of Number of Fe^{3+} Exchange Linkages on Local Magnetic Fields at Fe^{57} Nuclei in the System $YFe_{1-x}Al_xO_3$ (E/T)—V. F. Belov, T. A. Khimich, M. N. Shipko and M. I. Dakhis. 14(2), 437–40 (Aug. 1972); CPM-7208E0594

Dynamics of Vibrations of Sn^{119} Nuclei in Dilute Tin-Base Alloys (E)—V. V. Chekin, A. I. Velikodnyi, S. N. Glushko and E. D. Semenova. 14(2), 479–80(C) (Aug. 1972); CPM-7208E0636

Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14 (2), 530–2(C) (Aug. 1972); CPM-7208E0687

Nuclear-Gamma-Resonance Study of the Magnetic Anisotropy of Yttrium Iron Garnet (E/T)—G. N. Belozerskii, Yu. P. Khimich and Yu. M. Yakovlev. 14(4), 993–6 (Oct. 1972); CPM-7210D0808

Study of Iron Atom Vibrations in Vivianite and Pyrite Crystals Using Mössbauer Spectroscopy (E)—I. P. Suzdalev, I. A. Vinogradov and V. K. Imshennik. 14(5), 1136–42 (Nov. 1972); CPM-7211A1388

Effective Magnetic Fields at the Diamagnetic Tin Atoms in $MnSn_2$ (E)—V. A. Golovnin, S. B. Zezin and R. N. Kuz'min. 14(5), 1313–5(C) (Nov. 1972); CPM-7211A1565

Investigation of the Effects of the Glass—Crystal Transition on the Local Surroundings of ^{119}Sn Impurity Atoms in As_2Te_3 and in As_2Se_3-As_2Te_3 Based on the Mössbauer Effect (E)—P. P. Seregin and L. N. Vasil'ev. 14(5), 1325–6(C) (Nov. 1972); CPM-7211A1577

Interference of Hyperfine Components in the Scattering of γ Radiation by Mössbauer Nuclei (T)—A. S. Ivanov and A. V. Kolpakov. 14(6), 1537–8(C) (Dec. 1972); CPM-7212D0873

Mössbauer Effect in I^{129} Impurity Atoms in $A^{III}_2Te_3$, $A^{III}Te$, $A^V_2Te_3$ Crystals (E)—P. P. Seregin and É. P. Savin. 14(6), 1548–50(C) (Dec. 1972); CPM-7212D0884

Mössbauer Effect and Superconductivity of Tin under Pressure (T/E)—V. N. Panyushkin and E. N. Yakovlev. 14(6), 1579–80(C) (Dec. 1972); CPM-7212D0915

Impurity Atoms of Sn^{119} in the Helicoidal Antiferromagnet Au_3Mn (E)—N. N. Delyagin, É. N. Kornienko and V. I. Nesterov. 14(6), 1590–1(C) (Dec. 1972); CPM-7212D0926

Mössbauer Effect at ^{119}Sn Impurity Atoms in Gallium in Porous Glass (E)—V. N. Bogomolov, N. A. Klushin and P. P. Seregin. 14(7), 1729–31 (Jan. 1973); CPM-7301C0689

Characteristics of the Alpha→Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148

Crystal Electric Fields in Cadmium–Cobalt and Cadmium–Nickel Ferrites–Spinels (E/T)—O. A. Bayukov, V. P. Ikonnikov, G. N. Il'inova and G. P. Popov. 14(8), 2040–3 (Feb. 1973); CPM-7302E1166

Effect of Coherent Sound Vibrations on γ-γ Angular Correlation (T)—U. Kh. Kopvillem and L. N. Shakhmuratova. 14(8), 2125–6(C) (Feb. 1973); CPM-7302E1251

Relaxation of Mössbauer Spectra of $DyVO_4$ (E)—V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Mössbauer Determination of Orientation of Spins in the Tetrahedral Sublattice of $Bi_2Fe_4O_9$ (E/T)—V. A. Bokov, A. S. Kamzin and G. Ya. Karapet'yan. 14(8), 2168–70(C) (Feb. 1973); CPM-7302E1294

Effect of a Glass–Crystal Phase Transition on the Spin–Lattice Relaxation Time (E)—I. G. Gusakovskaya, T. I. Larkina and V. I. Gol'danskii. 14(9), 2274–6 (Mar. 1973); CPM-7303E1098

Induced Magnetic Fields at Diamagnetic Atoms in an Antiferromagnet (E)—I. S. Lyubutin and A. P. Dodokin. 14(9), 2368–9(C) (Mar. 1973); CPM-7303E1192

"Magnetic Anomaly" of the Probability of the Mössbauer Effect in Invar (E)—V. M. Belova, E. A. Brychkov, E. K. Zakharov, V. I. Nikolaev and S. S. Yakimov. 14(9), 2404–5(C) (Mar. 1973); CPM-7303E1228

Angular Spin Configurations in $MnCrFeO_4$ (E)—I. S. Lyubutin, T. V. Dmitrieva and L. M. Belyaev. 14(10), 2579–80 (Apr. 1973); CPM-7304E1225

Mössbauer Effect in Impurity Atoms of Fe^{57} in Quartz Single Crystals (E)—M. F. Vereshchak, A. K. Zhetbaev, D. K. Kaipov and K. K. Satpaev. 14(10), 2638–9(C) (Apr. 1973); CPM-7304E1284

Magnetic Sublattices in Nonstoichiometric Manganese–Zinc Ferrites (E)—Sh. Sh. Bashkirov, A. B. Liberman and V. I. Sinyavskii. 14 (11), 2776–8 (May 1973); CPM-7305D1004

Study of the Magnetic Properties of χ and θ Iron Carbide Using Mössbauer Spectroscopy (E)—Yu. V. Maksimov, I. P. Suzdalev and R. A. Arents. 14(11), 2832–4 (May 1973); CPM-7305D1060

Mössbauer Spectroscopic Investigation of the Structure of Layered Compounds of Graphite and Iron (E)—R. A. Stukan, Yu. N. Novikov, V. A. Povitskii and A. N. Salugin. 14(11), 2914–5(C) (May 1973); CPM-7305D1142

Mössbauer and Neutron-Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

Investigation of the α-Al_2O_3–Fe_2O_3 System by the Mössbauer Effect (E)—A. V. Kalyamin, B. G. Lur'e, L. A. Marshak and A. N. Murin. 14(12), 3083–4(C) (Jun. 1973); CPM-7306D0925

5.70.45. Radiation Damage

Magnetic Properties of Tl^{2+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682

Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6(C) (Aug. 1972); CPM-7208E0711

Radiation-Induced Defects and Their Influence on the Critical Current in Superconducting Niobium (E/T)—S. I. Tsypkin. 14(3), 811–2(C) (Sep. 1972); CPM-7209D0245

Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

Diffusion Processes in Irradiated Molecular Crystals (E/T)—A. I. Mikhailov, A. I. Bol'shakov, Ya. S. Lebedev and V. I. Gol'danskii. 14(4), 1000–6 (Oct. 1972); CPM-7210D0815

Kinetics of Annealing of Radiation Defects in LiF Crystals (E)—G. A. Andreev. 14(5), 1327–8(C) (Nov. 1972); CPM-7211A1579

Recombination Luminescence in the Crystals $Y_3Al_5O_{12}$–TR_1, TR_2 (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker and V. V. Osiko. 14(7), 1820–2 (Jan. 1973); CPM-7301C0780

Model of Irradiation-Produced ESR Centers in Aluminosilicates (T/E)—V. S. Grunin, V. A. Ioffe and I. S. Yanchevskaya. 14(7), 1839–41(C) (Jan. 1973); CPM-7301C0799

Optical Properties of Quasi-One-Dimensional and Quasi-Two-Dimensional Crystals (T)—L. N. Bulaevskii and Yu. A. Kukharenko. 14(8), 2076–80 (Feb. 1973); CPM-7302E1202

Absorption and Luminescence Spectra of Diamond Crystals in the Red Region of the Spectrum (E/T)—D. S. Nedzvetskii and V. A. Gaisin. 14(10), 2535–8 (Apr. 1973); CPM-7304E1181

ESR of Hg^+ Ions in K_2SO_4 Crystals (E)—V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(10), 2642–3(C) (Apr. 1973); CPM-7304E1288

Kinetics of Motion of Slip Bands in NaCl Crystals (E)—S. I. Zaitsev and É. M. Nadgornyi. 14(11), 2787–90 (May 1973); CPM-7305D1015

Coloration of PbF_2 Crystals by Irradiation and Their Electrical Properties (E)—V. A. Arkhangel'skaya, V. G. Erofeichev and M. N. Kiseleva. 14(12), 2953–5 (Jun. 1973); CPM-7306D0795

Temperature Dependence of Dislocation Mobility in Gamma Irradiated (10^7 rad Dose) NaCl Crystals (E/T)—G. A. Ermakov and É. M. Nadgornyi. 14(12), 2962–6 (Jun. 1973); CPM-7306D0804

5.70.50. Electrons and Positrons

5.70.50.15. Electron Diffraction and Scattering (Excluding LEED and RHEED)

Scattering of Electrons and Neutrons by Coupled Helicon—Magnon Waves (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(2), 387–90 (Aug. 1972); CPM-7208E0544

Angular Distribution of Inelastically Reflected Electrons (E)—I. M. Bronshtein, V. M. Stozharov and V. P. Pronin. 14(4), 927–30 (Oct. 1972); CPM-7210D0742

Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585

Electron Scattering by Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14(7), 1864–5(C) (Jan. 1973); CPM-7301C0824

Interpretation of the Energy-Loss Peaks in the Range 30–70 eV in the Spectra of Electrons Reflected from Transition Metals (E)—V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin and K. Sh. Chokin. 14(7), 1891–2(C) (Jan. 1973); CPM-7301C0851

Interpretation of Some Features of Plasma Loss Peaks in the Spectra of Electrons Reflected from Mo (E)—V. V. Zashkvara and V. S. Red'kin. 14(9), 2410–1(C) (Mar. 1973); CPM-7303E1234

Dependence of Angular Distribution of Electrons Inelastically Scattered by Metals upon Their Energy (E/T)—L. V. Vorotneva and L. G. Eliseenko. 14(11), 2751–3 (May 1973); CPM-7305D0979

Orientation Effects of β-Particle Scattering in Large-Thickness Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14(11), 2808–11 (May 1973); CPM-7305D1036

Channeling Effects in the Scattering of 50-keV Electrons in Thin Copper Crystals (E)—Yu. S. Korobochko, E. L. Berezovskii, B. D. Grachev, S. S. Kozlovskii and V. I. Mineev. 14(11), 2812–4 (May 1973); CPM-7305D1040

Energy Spectra of Electrons Transmitted by Thin Solid Films (E)—Kh. I. Fitting. 14(11), 2919–20(C) (May 1973); CPM-7305D1147

5.70.50.20. LEED and RHEED

Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583

Low-Energy Electron Diffraction from a (111) Germanium Surface During the Early Stages of Oxygen Adsorption (E)—B. Z. Ol'shanetskii, N. I. Makrushin and A. I. Volokitin. 14(11), 2713–6 (May 1973); CPM-7305D0941

5.70.50.30. Positron Annihilation in Solids

Positron Centers in Defective Ionic Crystals (T)—A. Z. Varisov and E. P. Prokop'ev. 14(2), 493–5(C) (Aug. 1972); CPM-7208E0650

Influence of Illumination on the Lifetime of Positrons in Silver Halide Crystals (E)—I. I. Bardyshev, V. I. Gol'danskii and A. D. Mokrushin. 14(3), 803–4(C) (Sep. 1972); CPM-7209D0237

Temperature Dependence of Positron Annihilation in a Metal (T)—A. A. Vorob'ev and K. P. Aref'ev. 14(4), 906–7 (Oct. 1972); CPM-7210D0721

Adsorbed State of Positronium Atoms (E)—A. O. Tatur and A. D. Mokrushin. 14(10), 2617–8(C) (Apr. 1973); CPM-7304E1263

Positron Annihilation in Certain Transition Metal Hydrides (E)—V. I. Sabin, R. A. Andrievskii, V. V. Gorbachev and A. D. Tsyganov. 14(11), 2815–7 (May 1973); CPM-7305D1043

5.70.50.90. Other Topics on Electrons and Positrons

Excitation of Longitudinal Electromagnetic Waves by an Electron Beam in the Plasma of a Solid (T)—R. R. Kikvidze, V. G. Kototeshvili and A. A. Rukhadze. 14(1), 146–8 (Jul. 1972); CPM-7207D1105

Origin of Oriented Maxima in the Bremsstrahlung Spectra of Nonrelativistic Electrons in a Single Crystal (T)—N. P. Kalashnikov, É. A. Koptelov and M. I. Ryazanov. 14(4), 1033–4 (Oct. 1972); CPM-7210D0848

5.70.60. Ion, Molecule and Heavy-Particle Bombardment

Formation and Annealing of Defects in Germanium During Bombardment with Krypton Ions (E)—I. A. Abroyan, M. M. Kalugin and O. A. Podsvirov. 14(1), 203–4(C) (Jul. 1972); CPM-7207D1162

Relaxation of the Electron Emission from Germanium Bombarded with N^+_2 and Kr^+ Ions (E)—N. M. Omel'yanovskaya and S. Ya. Lebedev. 14(6), 1542–3(C) (Dec. 1972); CPM-7212D0878

Temperature and Current Studies of the Relaxation Effect in Ion–Electron Emission in Si (E)—N. M. Omel'yanovskaya, S. Ya. Lebedev and S. D. Panin. 14(7), 1895–6(C) (Jan. 1973); CPM-7301C0855

The "Shadow Effect" in the Bombardment of Single Crystals by Heavy Ions (E)—S. D. Panin, S. Ya. Lebedev and V. E. Dubinskii. 14(8), 2123–4(C) (Feb. 1973); CPM-7302E1249

Anisotropy of the Energy Spectra of Electrons Emitted as a Result of Proton Bombardment of Molybdenum (E/T)—L. B. Begrambekov, S. K. Zhdanov and V. G. Tel'kovskii. 14(12), 3075–6(C) (Jun. 1973); CPM-7306D0917

5.70.70. Neutrons

5.70.70.10. Neutron Diffraction

Influence of an External Field Thermal Hysteresis of the Magnetic Structure of Chromium (E)—V. S. Golovkin, V. N. Bykov and V. A. Levdik. 14(6), 1533–4(C) (Dec. 1972); CPM-7212D0869

Mössbauer and Neutron-Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

5.70.70.20. Neutron Scattering

Inelastic Scattering of Slow Neutrons by Localized Vibrations of Interstitial Atoms (T)—I. P. Dzyub and V. Z. Kochmarskii. 14(1), 1–8 (Jul. 1972); CPM-7207D0960

Fluctuations and Scattering of Slow Neutrons and Electromagnetic Waves near the Critical Antiferromagnetic–Ferromagnetic Transition Point (T)—I. A. Akhiezer and A. É. Ginzburg. 14(1), 142–5 (Jul. 1972); CPM-7207D1101

Scattering of Electrons and Neutrons by Coupled Helicon—Magnon Waves (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(2), 387–90 (Aug. 1972); CPM-7208E0544

Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

Fluctuations and Scattering of Slow Neutrons by Collective Excitations of the Electron Fermi Liquid in Metals (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(7), 1761–5 (Jan. 1973); CPM-7301C0721

Interaction of Neutrons and Light with Magnetoscoustic Waves in Crystals Having a Ferromagnetic–Antiferromagnetic Transition (T)—A. É. Ginzburg, L. N. Davydov and Z. A. Spol'nik. 14(7), 1774–8 (Jan. 1973); CPM-7301C0734
Critical Scattering of Neutrons in Ferrites and Antiferromagnets in a Magnetic Field (T)—V. G. Bar'yakhtar, V. V. Tarasenko and D. A. Yablonskii. 14(8), 2006–9 (Feb. 1973); CPM-7302E1132
Interference in Neutron Scattering in Anharmonic Crystals (T)—N. M. Plakida. 14(10), 2462–7 (Apr. 1973); CPM-7304E1108

5.70.80. Channelling in Crystals

Influence of Channeling on the Scintillation Efficiency of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(1), 209–10(C) (Jul. 1972); CPM-7207D1168
Method for Determining the Thermal Vibration Amplitude of an Impurity Atom Using the Channeling Effect (T)—M. A. Kumakhov. 14(4), 963–5 (Oct. 1972); CPM-7210D0778
Shape of the Planar Shadow for Scattering of Particles by a Thick Single Crystal (T)—G. P. Pokhil and A. F. Tulinov. 14(7), 1669–72 (Jan. 1973); CPM-7301C0629
Channeling Effects in the Scattering of 50–keV Electrons in Thin Copper Crystals (E)—Yu. S. Korobochko, E. L. Berezovskii, B. D. Grachev, S. S. Kozlovskii and V. I. Mineev. 14(11), 2812–4 (May 1973); CPM-7305D1040

5.70.85. Energy–Loss and Energy–Range Relations

Distribution Function and Energy Losses of Hot Electrons Interacting with Optical Phonons (T)—B. L. Gel'mont, R. I. Lyagushchenko and I. N. Yassievich. 14(2), 445–52 (Aug. 1972); CPM-7208E0602
Characteristic Energy Loss Spectra of Electrons from La, Ce, Pr, and Nd Surfaces (E)—V. V. Zashkvara, E. V. Tsveiman, M. I. Korsunskii and V. S. Red'kin. 14(6), 1564–6(C) (Dec. 1972); CPM-7212D0900
Interpretation of the Energy–Loss Peaks in the Range 30–70 eV in the Spectra of Electrons Reflected from Transition Metals (E)—V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin and K. Sh. Chokin. 14(7), 1891–2(C) (Jan. 1973); CPM-7301C0851
Interpretation of Some Features of Plasma Loss Peaks in the Spectra of Electrons Reflected from Mo (E)—V. V. Zashkvara and V. S. Red'kin. 14(9), 2410–1(C) (Mar. 1973); CPM-7303E1234
Energy Losses of Fast Electrons Due to the Creation of Excitons in Magnetic Fields (T)—A. E. Glauberman and A. V. Pundyk. 14 (10), 2603–4 (Apr. 1973); CPM-7304E1249
Energy Spectra of Electrons Transmitted by Thin Solid Films (E)—Kh. I. Fitting. 14(11), 2919–20(C) (May 1973); CPM-7305D1147

5.80. PHYSICS OF SURFACES, THIN FILMS, INTERFACES AND SMALL PARTICLES

5.80.10. Structural Properties of Surfaces, Thin Films, Interfaces, Whiskers and Dendrites

5.80.10.20. Growth, Deposition, Epitaxy, etc.

Memory of Semiconductor Crystals and Photoepitaxy (E)—G. I. Distler and L. A. Shenyavskaya. 14(5), 1203–6 (Nov. 1972); CPM-7211A1455
Nucleation of Vacuum–Deposited Au on Thermal Oxides of Si (E)—V. I. Prokhorov, L. M. Sorokin and V. S. Chernyak. 14(5), 1323–4 (C) (Nov. 1972); CPM-7211A1575
Vacuum–Evaporated Ferroelectric Barium Titanate Thinner Than 1000 Å (E)—Yu. Ya. Tomashpol'skii and M. A. Sevost'yanov. 14 (9), 2319–21 (Mar. 1973); CPM-7303E1143
Elastic Deformations Arising during Crystal Growth (T)—L. A. Pastur and É. P. Fel'dman. 14(9), 2322–4 (Mar. 1973); CPM-7303E1146
Resistometric and Electron–Microscope Investigation of the Mechanism of Growth of Bismuth Films (E)—V. N. Vigdorovich, G. A. Ukhlinov and D. V. Yakashvili. 14(9), 2370–1(C) (Mar. 1973); CPM-7303E1194

5.80.10.30. Surface and Crystal Structure

Microstructure of Domains and Domain Walls in Single–Crystal Films of Barium Titanate (E)—S. I. Yakunin, V. V. Shakmanov, G. V. Spivak and N. V. Vasil'eva. 14(2), 310–3 (Aug. 1972); CPM-7208E0467
Anomalous Reflection of X Rays (T/E)—B. M. Rovinskii, V. M. Sinaiskii and V. I. Sidenko. 14(2), 340–3 (Aug. 1972); CPM-7208E0497
Structure of Lead Films on a Tungsten (100) Surface (E)—D. A. Gorodetskii and A. A. Yas'ko. 14(3), 636–8 (Sep. 1972); CPM-7209D0070
Anisotropic Surface Structure Change in Refractory Metal Crystals During Directional Transport Processes (E/T)—I. V. Zakurdaev, E. Ya. Chernyak, G. N. Shuppe and V. N. Yakovlev. 14(12), 2977–80 (Jun. 1973); CPM-7306D0819

5.80.10.40. Grain Boundaries and Twinning

Interaction of Stress Waves with a Boundary in an LiF Bicrystal (E)—I. S. Guz' and G. S. Demina. 14(4), 1087–8(C) (Oct. 1972); CPM-7210D0902
Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744
Influence of Slip and Mechanical Twinning on the Density of Iron (E)—I. A. Gindin, V. M. Rozenberg, Ya. D. Starodubov and L. A. Chirkina. 14(6), 1414–6 (Dec. 1972); CPM-7212D0750
Dislocation Structure of Large–Angle Metal Grain Boundaries and Metal Recrystallization (T)—I. M. Mikhailovskii. 14(10), 2475–9 (Apr. 1973); CPM-7304E1121
Nonconservative Motion of Dislocations near Grain Boundaries Which Are Sources or Sinks of Vacancies (T)—A. L. Roitburd and B. A. Vershok. 14(11), 2818–21 (May 1973); CPM-7305D1046
Formation of Large–Angle Grain Boundaries Under the Influence of Mechanical Stresses (E)—Zh. I. Dranova and I. M. Mikhailovskii. 14(12), 3104–5(C) (Jun. 1973); CPM-7306D0946

5.80.10.50. Faults and Defects

Inelastic Phenomena in Sodium Chloride Whiskers (E)—L. B. Zuev, V. D. Mal'tsev, L. M. Vysoven' and V. A. Stupin. 14(4), 1096–7 (C) (Oct. 1972); CPM-7210D0911
Investigation of the Dislocation Structure of Stretch–Deformed Copper Whiskers by Analysis of Lattice Disorientations (E)—V. S. Postnikov, A. M. Belikov, A. T. Kosilov and V. B. Shepilov. 14(6), 1529–30(C) (Dec. 1972); CPM-7212D0865
Elastic Deformations Arising during Crystal Growth (T)—L. A. Pastur and É. P. Fel'dman. 14(9), 2322–4 (Mar. 1973); CPM-7303E1146
Surface Electric Field Arising from Three–Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

5.80.10.90. Other Topics on Structural Properties of Surfaces, etc.

Transmission of Information through Au Boundary Layers (E)—G. I. Distler, V. G. Obronov and Yu. M. Gerasimov. 14(3), 580–3 (Sep. 1972); CPM-7209D0014
Structure of Small–Angle Torsion Boundaries in the (001) Plane (E)—V. S. Postnikov, K. S. Solov'ev, V. M. Ievlev, I. V. Zolotukhin and Yu. K. Netusov. 14(5), 1311–2(C) (Nov. 1972); CPM-7211A1563

5.80.15. Mechanical Properties

Inelastic Phenomena in Sodium Chloride Whiskers (E)—L. B. Zuev, V. D. Mal'tsev, L. M. Vysoven' and V. A. Stupin. 14(4), 1096–7 (C) (Oct. 1972); CPM-7210D0911
Mechanical Strains in Vacuum–Deposited CdTe Films (E)—A. I. Vovsi, L. P. Strakhov and O. A. Yakovuk. 14(5), 1251–4 (Nov. 1972); CPM-7211A1503
Anisotropy of the Thermal Expansion of InTe (E)—Yu. A. Paukshte and L. Z. Dankus. 14(5), 1316–7(C) (Nov. 1972); CPM-7211A1568
Interaction of Surface Magnetostatic Waves with Elastic Rayleigh Waves in Cubic Ferromagnets (T)—V. I. Shcheglov. 14(6), 1417–20 (Dec. 1972); CPM-7212D0753

Inclined Texture Axis in Zinc Oxide Films for Ultrasonic Transducers (E)—N. L. Kenigsberg and A. N. Chernets. 14(9), 2227–9 (Mar. 1973); CPM-7303E1051

Elastic Deformations Arising during Crystal Growth (T)—L. A. Pastur and É. P. Fel'dman. 14(9), 2322–4 (Mar. 1973); CPM-7303E1146

Accelerating Effect of Ultraviolet Radiation on Submicroscopic Crack Formation in Loaded Polymers (E)—Kh. Akimbekov, V. S. Kuksenko, S. Nizamidinov, A. I. Slutsker and A. A. Ysstrebinskii. 14(9), 2339–43 (Mar. 1973); CPM-7303E1163

Elastic Stresses and Strains at the Interface of an Epitaxial β-Co—Cu Bicrystal (T/E)—B. G. Bord, L. S. Palatnik, A. I. Fedorenko and É. P. Fel'dman. 14(11), 2700–3 (May 1973); CPM-7305D0928

Changes in Mechanical Stress of Cadmium Telluride Thin Films Caused by Photostimulated Adsorption of Oxygen (E)—A. I. Vovsi and L. I. Straklov. 14(11), 2863–5 (May 1973); CPM-7305D1091

Formation of Large-Angle Grain Boundaries Under the Influence of Mechanical Stresses (E)—Zh. I. Dranova and I. M. Mikhailovskii. 14(12), 3104–5(C) (Jun. 1973); CPM-7306D0946

5.80.17. Acoustical Properties

New Type of Acoustic Surface Waves in Conducting Crystals (T)—Yu. V. Gulyaev. 14(5), 1318–9(C) (Nov. 1972); CPM-7211A1570

Inclined Texture Axis in Zinc Oxide Films for Ultrasonic Transducers (E)—N. L. Kenigsberg and A. N. Chernets. 14(9), 2227–9 (Mar. 1973); CPM-7303E1051

Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, É. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

Absorption of Rayleigh Acoustic Waves in Metals in Magnetic Fields (T)—R. G. Mints and G. A. Sorokin. 14(12), 3032–6 (Jun. 1973); CPM-7306D0874

5.80.20. Chemical Properties and Treatments of Surfaces

5.80.20.20. Etching and Dissolution

Spatial Decoration of Defects in CsI Crystals (E)—N. L. Sizova, M. O. Kliya, V. N. Rozhanskii and A. A. Urusovskaya. 14(3), 743–6 (Sep. 1972); CPM-7209D0177

Effect of Mechanical Stress on the Shapes of Dislocation Etch Pits in Silicon (E)—V. A. Mal'tseva, B. D. Platonov, S. Yu. Sofronova and Ya. M. Bekker. 14(4), 1053–4(C) (Oct. 1972); CPM-7210D0868

Nonconservative Motion of Dislocations near Grain Boundaries Which Are Sources or Sinks of Vacancies (T)—A. L. Roitburd and B. A. Vershok. 14(11), 2818–21 (May 1973); CPM-7305D1046

5.80.20.90. Other Chemical Properties and Treatments of Surfaces

Emission of Activated Hydrogen and Hydrogen Peroxide from Freshly Treated Surfaces of Solids (E)—V. V. Mitrofanov, S. A. Smirnov and V. A. Fogel'. 14(3), 781–2(C) (Sep. 1972); CPM-7209D0215

Influence of Surface Contamination on the Fine Structure of the Angular Characteristics of the Secondary Electron Emission Coefficient of Single Crystals (E)—V. V. Korablev. 14(6), 1539–41 (C) (Dec. 1972); CPM-7212D0875

Possible Mechanism for the Two Stages of Exoelectron Emission During Oxidation of a Metal (E)—A. G. Gel'man and A. I. Fainshtein. 14(7), 1752–5 (Jan. 1973); CPM-7301C0712

Changes in the Effect of Oxygen on the Thermionic-Emission Current of K^+ Ions (E)—L. P. Rekova, V. V. Mozgin, O. V. Kisel' and Ya. M. Fogel'. 14(8), 1961–5 (Feb. 1973); CPM-7302E1087

5.80.25. Impact Phenomena of Surfaces

5.80.25.30. Electron Impact: Secondary Emission

Anisotropy in the Secondary Emission Properties of Single Crystals when Scanned by an Electron Beam (E)—V. V. Korablev and V. V. Ionov. 14(3), 692–5 (Sep. 1972); CPM-7209D0126

Influence of Surface Contamination on the Fine Structure of the Angular Characteristics of the Secondary Electron Emission Coefficient of Single Crystals (E)—V. V. Korablev. 14(6), 1539–41 (C) (Dec. 1972); CPM-7212D0875

Delay in Secondary Electron Emission from Substances (E)—A. M. Tyutikov and V. K. Kozyrev. 14(6), 1605–6(C) (Dec. 1972); CPM-7212D0941

Electrical Conduction Mechanism in the Ferroelectric Semiconductor SbSI (E)—E. S. Artobolevskaya, E. V. Chenskii, R. S. Gvozdover and V. I. Petrov. 14(8), 1935–9 (Feb. 1973); CPM-7302E1061

Secondary Electron Emission from Radioactive Precipitates (E)—B. V. Bobykin, S. K. Lyubov and Yu. A. Nevinnyi. 14(11), 2912–3(C) (May 1973); CPM-7305D1140

Anisotropy of the True Secondary Electron Emission (E)—M. V. Gomoyunova. 14(12), 2947–9 (Jun. 1973); CPM-7306D0789

5.80.25.90. Other Impact Phenomena of Surfaces, etc.

Energy Spectra of W^+ and Mo^+ Ions Obtained in the Sputtering of Tungsten–Molybdenum Alloys (E)—A. A. Adylov, V. I. Veksler, A. M. Reznik and S. A. Furer. 14(2), 396–8 (Aug. 1972); CPM-7208E0553

Mechanisms for the Laser Destruction of Alkali Halide Crystals and for the Multiphoton Ionization of Impurity Centers (E/T)—G. I. Aseev and M. L. Kats. 14(5), 1122–5 (Nov. 1972); CPM-7211A1374

Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585

Energy Balance and Dynamics of Damage of Transparent Dielectrics by Laser Radiation (E)—Yu. V. Arkhipov, N. V. Morachevskii, V. V. Morozov and F. S. Faizullov. 14(6), 1510–3 (Dec. 1972); CPM-7212D0846

Characteristic Energy Loss Spectra of Electrons from La, Ce, Pr, and Nd Surfaces (E)—V. V. Zashkvara, E. V. Tsveiman, M. I. Korsunskii and V. S. Red'kin. 14(6), 1564–6(C) (Dec. 1972); CPM-7212D0900

Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583

Angular Dependences of the Energy Spectra of the Ion Component in the Cathodic Sputtering of Polycrystalline Molybdenum with Cs^+ Ions (E)—A. A. Adylov, V. I. Veksler and A. M. Reznik. 14(11), 2696–9 (May 1973); CPM-7305D0924

5.80.30. Photoemission

5.80.30.25. Semiconductors and Insulators

Spectral Investigation of Auto-Photoemission from CdS Single Crystals under Pulsed and Constant Voltage Conditions (E)—B. V. Novikov, A. E. Cherednichenko and P. G. Shlyakhtenko. 14(1), 14–7 (Jul. 1972); CPM-7207D0973

Quantum Efficiency of the Internal Photoelectric Effects and Impact Ionization in Germanium (E)—V. N. Ivakhno and I. I. Novak. 14 (1), 157–60 (Jul. 1972); CPM-7207D1116

Photoemission Studies of Oxyhalide Crystals of Bismuth (E)—V. M. Bentsa, M. V. Shtilikha, D. V. Chepur, Yu. Yu. Kampi and V. V. Matyashevskii. 14(3), 671–3 (Sep. 1972); CPM-7209D0105

Electrical Conduction Mechanism in the Ferroelectric Semiconductor SbSI (E)—E. S. Artobolevskaya, E. V. Chenskii, R. S. Gvozdover and V. I. Petrov. 14(8), 1935–9 (Feb. 1973); CPM-7302E1061

Photoionization of Molecules of Anthracene and Its Methyl Derivatives Embedded in Polymethylmethacrylate (E)—F. I. Vilesov and D. A. Sukhov. 14(8), 2069–72 (Feb. 1973); CPM-7302E1195

X-Ray Induced Electron Emission from Perfect Germanium Single Crystals Under (111) Bragg Reflection Conditions (E)—V. N. Shchemelev and M. V. Kruglov. 14(12), 2988–91 (Jun. 1973); CPM-7306D0830

5.80.30.90. Other Topics on Photoemission

Possible Mechanism for the Two Stages of Exoelectron Emission During Oxidation of a Metal (E)—A. G. Gel'man and A. I. Fainshtein. 14(7), 1752–5 (Jan. 1973); CPM-7301C0712

Indirect Exchange Interaction Involving Photoelectrons (T)—A. A. Berdyshev and B. M. Letfulov. 14(7), 1824–5(C) (Jan. 1973); CPM-7301C0784

Experimental Investigation of the Frequency Dependence of Photoelectric Emission from Metals (E)—S. D. Babenko, T. S. Rudenko, V. A. Benderskii and Ya. M. Zolotovitskii. 14(12), 2950–2 (Jun. 1973); CPM-7306D0792

5.80.35. Other Emission Phenomena

5.80.35.15. Field Emission and Field Ionization

Influence of the Adsorption of SiO Molecules on the Field Emission of Electrons from p-Type Germanium (E)—R. Z. Bakhtizin and V. I. Stepanov. 14(1), 245–6(C) (Jul. 1972); CPM-7207D1204

Adsorption of Barium on Platinum (E)—Yu. V. Zubenko. 14(2), 377–9 (Aug. 1972); CPM-7208E0534

Transient Effects Associated with Field Emission of Electrons from Silicon (E)—G. N. Fursei, N. V. Egorov and S. P. Manokhin. 14(6), 1453–6 (Dec. 1972); CPM-7212D0789

Breakdown in p-Type Ge Field Emitters (E)—V. G. Ivanov and T. P. Smirnova. 14(10), 2624–5(C) (Apr. 1973); CPM-7304E1270

5.80.35.90. Other Topics

Connection Between Electrical Breakdown and the Form of the Volt—Ampere Characteristics of the Autoemission Current From p-Ge (E)—P. G. Shlyakhtenko, R. Z. Bakhtizin and N. V. Mileshkina. 14(5), 1320–2(C) (Nov. 1972); CPM-7211A1572

Changes in the Effect of Oxygen on the Thermionic–Emission Current of K^+ Ions (E)—L. P. Rekova, V. V. Mozgin, O. V. Kisel' and Ya. M. Fogel'. 14(8), 1961–5 (Feb. 1973); CPM-7302E1087

Anisotropic Surface Structure Change in Refractory Metal Crystals During Directional Transport Processes (E/T)—I. V. Zakurdaev, E. Ya. Chernyak, G. N. Shuppe and V. N. Yakovlev. 14(12), 2977–80 (Jun. 1973); CPM-7306D0819

5.80.40. Transport Properties and Phenomena of Surfaces, etc.

5.80.40.15. Electronic and Thermal Transport

Temperature Dependence of the Amplitude of the Quantum Oscillations of the Resistance of Thin Tin Films (E/T)—Yu. F. Komnik, E. I. Bukhshtab, Yu. V. Nikitin and Ch. Sulkovskii. 14(2), 543–5(C) (Aug. 1972); CPM-7208E0700

Impurity–Level Energies in Magnesium Phthalocyanine Films (E)—V. A. Benderskii, A. I. Belkind, M. I. Fedorov and S. B. Aleksandrov. 14(3), 674–7 (Sep. 1972); CPM-7209D0108

Electrical Conductivity of Diphenylpolyene Films (E)—N. I. Ganushchak, N. I. Gritsenko and M. V. Kurik. 14(4), 1071–2(C) (Oct. 1972); CPM-7210D0886

Magnetoresistance of Island Films of Metals on Insulators (E)—B. T. Boiko, L. S. Palatnik, V. P. Kopach and S. B. Melent'ev. 14(4), 1090–1(C) (Oct. 1972); CPM-7210D0905

Switching Effect in Pyrolytic VO_2 Films (E)—A. G. Zhdan, A. S. Darevskii, M. E. Chugunova and I. A. Serbinov. 14(7), 1879–80 (C) (Jan. 1973); CPM-7301C0839

Transformation of the "Amorphous" Phase of Bismuth Thin Films into the Crystalline Phase at Small Thicknesses (E)—B. I. Belevtsev, Yu. F. Komnik and L. A. Yatsuk. 14(7), 1887–8(C) (Jan. 1973); CPM-7301C0847

Resistometric and Electron–Microscope Investigation of the Mechanism of Growth of Bismuth Films (E)—V. N. Vigdorovich, G. A. Ukhlinov and D. V. Yakashvili. 14(9), 2370–1(C) (Mar. 1973); CPM-7303E1194

Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, E. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

5.80.40.30. Surface Diffusion

Diffusion Mechanism of Nucleation of Gold on an Ionic Crystal (E)—V. I. Trofimov and V. M. Luk'yanovich. 14(1), 239–41(C) (Jul. 1972); CPM-7207D1198

Adsorption of Barium on Platinum (E)—Yu. V. Zubenko. 14(2), 377–9 (Aug. 1972); CPM-7208E0534

Investigation of the Surface Self–Diffusion of the Alloy W+Re in a Field–Emission Electron Microscope (E)—V. A. Kuznetsov. 14(8), 2135–7(C) (Feb. 1973); CPM-7302E1261

5.80.40.50. Skin Effects

Determination of the Mean Free Path of Electrons in Metals (T)—V. P. Naberezhnykh, L. T. Tsymbal and M. S. Purchinskii. 14(2), 431–3 (Aug. 1972); CPM-7208E0588

5.80.40.80. Photoconductivity and Photovoltaic Effects

Memory of Semiconductor Crystals and Photoepitaxy (E)—G. I. Distler and L. A. Shenyavskaya. 14(5), 1203–6 (Nov. 1972); CPM-7211A1455

Photo–EMF Spectrum of a Silver Bromide Emulsion Film (E)—N. N. Korotaev and P. V. Meiklyar. 14(10), 2656–7(C) (Apr. 1973); CPM-7304E1302

Electrically Stimulated Inversion of Photoconductivity in a Heterojunction Containing Color Centers (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(11), 2860–2 (May 1973); CPM-7305D1088

5.80.40.90. Other Transport Phenomena of Surfaces, etc.

Special Characteristics of the Thermo–EMF of Thin Bismuth Films (E)—V. I. Burchakova, D. V. Gitsu and M. I. Kozlovskii. 14(3), 775–6(C) (Sep. 1972); CPM-7209D0209

Surface "Pyroelectric" Effect in Insulating Films (T/E)—L. M. Blinov, S. V. Ermakov and L. M. Korolev. 14(12), 3073–4(C) (Jun. 1973); CPM-7306D0915

5.80.45. Contacts, Junctions, Sandwiches and Interfaces

5.80.45.10. Contact Potentials and Work Functions

Simultaneous Adsorption of Cesium and Barium onto Tungsten and Niobium Crystal Surfaces (E/T)—Yu. M. Konoplev, A. G. Naumovets and A. G. Fedorus. 14(2), 273–8 (Aug. 1972); CPM-7208E0430

Dependence of the Piezoeffect in Barium Titanate on the Means of Screening the Spontaneous Induction (T)—B. M. Vul, G. M. Guro and I. I. Ivanchik. 14(3), 602–7 (Sep. 1972); CPM-7209D0036

Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583

Work Function of Film Systems and Heat of Desorption of Particles from a Film (E)—É. Ya. Zandberg and A. Ya. Tontegode. 14(7), 1850–2(C) (Jan. 1973); CPM-7301C0810

Change in the Surface Potential of Ge in an Electrolyte During Mechanical Deformation (E)—P. P. Konorov and Yu. A. Tarantov. 14(7), 1881–2(C) (Jan. 1973); CPM-7301C0841

Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Changes in the Work Function of Electrons Emitted from Centers in Gold Films Activated with Barium Oxide (E)—Yu. A. Kulyupin and R. D. Fedorovich. 14(10), 2663–4(C) (Apr. 1973); CPM-7304E1309

Heat of Adsorption of Barium on (100) and (110) Faces of Tungsten and Molybdenum (E)—B. V. Bondarenko, N. D. Konovalov and E. A. Tishin. 14(12), 3078(C) (Jun. 1973); CPM-7306D0920

5.80.45.40. Tunneling

Mössbauer Effect at ^{119}Sn Impurity Atoms in Gallium in Porous Glass (E)—V. N. Bogomolov, N. A. Klushin and P. P. Seregin. 14(7), 1729–31 (Jan. 1973); CPM-7301C0689

Effect of Tunnel Extraction of Excitations from a Superconductor on the Superconducting Phase Transition (T)—A. G. Aronov and V. L. Gurevich. 14(9), 2309–11 (Mar. 1973); CPM-7303E1133

Tunnel Ionization of Excited In^+ Centers in KCl:In (E)—V. I. Leiman. 14(12), 3057–60 (Jun. 1973); CPM-7306D0899

5.80.45.70. Semiconductor to Semiconductor Contacts, etc. and Heterojunctions

Color Centers in a Heterojunction (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(6), 1531–2(C) (Dec. 1972); CPM-7212D0867

Electrically Stimulated Inversion of Photoconductivity in a Heterojunction Containing Color Centers (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(11), 2860–2 (May 1973); CPM-7305D1088

5.80.45.80. Superconducting Tunnel and Weak-Link Junctions

"Intrinsic" Steps on the Current–Voltage Characteristics of Josephson Point Contacts (E)—S. I. Bondarenko, I. M. Dmitrienko and T. P. Narbut. 14(2), 295–9 (Aug. 1972); CPM-7208E0452

Properties of Superconducting Point Contacts (E)—V. N. Gubankov, K. K. Likharev and N. M. Margolin. 14(4), 819–25 (Oct. 1972); CPM-7210D0634

Magnetic Characteristics of Superconducting Mercury in Chrysotile Asbestos (E)—V. N. Bogomolov and V. K. Krivosheev. 14(4), 1059–60(C) (Oct. 1972); CPM-7210D0874

Superconductivity of Mercury in Channels of a NaX Zeolite (E)—V. N. Bogomolov. 14(5), 1361–3(C) (Nov. 1972); CPM-7211A1613

Filamentary Model of a Superconductor in a Porous Material (T)—Yu. Yu. Abramov, L. A. Bol'shov and V. A. Roslyakov. 14(8), 1926–30 (Feb. 1973); CPM-7302E1052

Effect of Tunnel Extraction of Excitations from a Superconductor on the Superconducting Phase Transition (T)—A. G. Aronov and V. L. Gurevich. 14(9), 2309–11 (Mar. 1973); CPM-7303E1133

5.80.45.90. Other Topics in Contacts, etc.

Acoustoelectric Effect in a Piezoelectric–Semiconductor Layered Structure (E)—A. M. Kmita and A. V. Medved'. 14(9), 2285–93 (Mar. 1973); CPM-7303E1109

Surface Electric Field Arising from Three–Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Surface Optical Vibrations in a Thin Film (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(11), 2849–52 (May 1973); CPM-7305D1077

5.80.60. Optical and Dielectric Properties of Surfaces, etc.

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Surface Optical Vibrations in Ionic Crystal Plates (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(2), 453–9 (Aug. 1972); CPM-7208E0610

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9.10. ERRATA

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Erratum: Correction to the Paper by V. A. Timofeev "Shift of the Paramagnetic Resonance Line Due to a Spin–Phonon Interaction" [11, 1897 (1970)] (E)—V. A. Timofeev. 14(4), 1089(C) (Oct. 1972); CPM-7210D0904

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Erratum: General Theory of Transport Phenomena in a Semiconductor with a Strong Electric Field [13, 2729 (1972)] (T)—V. V. Bryksin and and Yu. A. Firsov. 14(6), 1615(C) (Dec. 1972); CPM-7212D0951

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Abdrashitova, É. I.—ESR of Cr^{3+} in the Spinel $MgCr_2O_4$ Formed in the Glassy Matrix $2MgO.5SiO_2.2Al_2O_3.nCr_2O_3$ after Crystallization (E/T)—É. I. Abdrashitova and R. Ya. Khodakovskaya. 14(4), 1055–6(C) (Oct. 1972); CPM-7210D0870

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—Influence of Temperature on the ESR Spectrum of Mn^{2+} in Cs_2SO_4 (E)—R. Yu. Abdulsabirov, Yu. S. Greznev, M. M. Zaripov and V. G. Stepanov. 14(6), 1569–70(C) (Dec. 1972); CPM-7212D0905

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—Electron Spin Resonance of V^{2+} Ions in BaF_2 (E)—R. Yu. Abdulsabirov, V. S. Kropotov, M. S. Orlov and V. G. Stepanov. 14 (11), 2917(C) (May 1973); CPM-7305D1145

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Adylov, A. A.—Energy Spectra of W^+ and Mo^+ Ions Obtained in the Sputtering of Tungsten–Molybdenum Alloys (E)—A. A. Adylov, V. I. Veksler, A. M. Reznik and S. A. Furer. 14(2), 396–8 (Aug. 1972); CPM-7208E0553

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—Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14(11), 2835–7 (May 1973); CPM-7305D1063

Agishev, V. M.—Determination of the Composition of Guinier–Preston Zones by the Method of Relative Intensities of Diffuse Effects (E/T)—V. M. Agishev and K. M. Yamaleev. 14(2), 279–82 (Aug. 1972); CPM-7208E0436

Agranovich, V. M.—Surface Excitons in an Insulator Bounded by a Metal (T)—V. M. Agranovich, A. G. Mal'shukov and M. A. Mekhtiev. 14(3), 725–31 (Sep. 1972); CPM-7209D0159

—Surface Excitons and Phonons at a Metal–Insulator Interface in the Presence of Charge Transfer (T)—V. M. Agranovich. 14(12), 3085–6(C) (Jun. 1973); CPM-7306D0927

Ainbinder, N. E.—Equations for Nuclear Quadrupole Relaxation in Molecular Crystals Allowing for Nondiagonal Elements of the Density Matrix (T)—N. N. Korst, V. V. Tsyganov and N. E. Ainbinder. 14(8), 2118–9(C) (Feb. 1973); CPM-7302E1244

Aizenberg, I. B.—Effect of the Indirect Exchange Interaction on the Crystal Field Parameters of Rhombic Er^{3+} Centers in Fluorite Crystals (T/E)—I. B. Aizenberg, M. D. Davydova and A. L. Stolov. 14(11), 2710–2 (May 1973); CPM-7305D0938

Akhiezer, A. I.—Parametric Excitation of Hypersound in Ferromagnets (T)—A. I. Akhiezer, V. G. Bar'yakhtar and A. G. Kvirikadze. 14(3), 757–9 (Sep. 1972); CPM-7209D0191

Akhiezer, I. A.—Fluctuations and Scattering of Slow Neutrons and Electromagnetic Waves near the Critical Antiferromagnetic–Ferromagnetic Transition Point (T)—I. A. Akhiezer and A. É. Ginzburg. 14(1), 142–5 (Jul. 1972); CPM-7207D1101

—Scattering of Electrons and Neutrons by Coupled Helicon—Magnon Waves (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(2), 387–90 (Aug. 1972); CPM-7208E0544

—Fluctuations and Scattering of Slow Neutrons by Collective Excitations of the Electron Fermi Liquid in Metals (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(7), 1761–5 (Jan. 1973); CPM-7301C0721

—Excitation of Ultrasound in Metals by a Beam of Charged Particles (T)—I. A. Akhiezer and V. T. Lazurik–El'tsufin. 14(12), 3093(C) (Jun. 1973); CPM-7306D0935

Akhmed-zade, K. A.—Paramagnetic Centers Produced by Mechanical Destruction of Silica (E/T)—K. A. Akhmed-zade, V. V. Baptizmanskii, V. A. Zakrevskii and É. E. Tomashevskii. 14(2), 351–4 (Aug. 1972); CPM-7208E0508

Akimbekov, Kh.—Accelerating Effect of Ultraviolet Radiation on Submicroscopic Crack Formation in Loaded Polymers (E)—Kh. Akimbekov, V. S. Kuksenko, S. Nizamidinov, A. I. Slutsker and A. A. Yastrebinskii. 14(9), 2339–43 (Mar. 1973); CPM-7303E1163

Aknazarov, S. Kh.—Observation of the Domain Structure in KDP by Low-Temperature X-Ray Photography Using a Widely Diverging Beam (E)—V. Sh. Shekhtman, L. G. Shabel'nikov, I. M. Shmyt'ko and S. Kh. Aknazarov. 14(11), 2690–3 (May 1973); CPM-7305D0918

Akopyan, R. M.—Electroabsorption in CdTe (E/T)—R. M. Akopyan, Yu. N. Berozashvili, A. V. Dundua and D. Sh. Lordkipanidze. 14 (3), 801–2(C) (Sep. 1972); CPM-7209D0235

Aksenov, V. L.—Stability of Anharmonic Crystals with Vacancies (T) —V. L. Aksenov. 14(7), 1718–22 (Jan. 1973); CPM-7301C0678

Aleksandrov, K. S.—Thermal Capacity of the Ferroelectric $NaNH_4SeO_4.2H_2O$ (E/T)—K. S. Aleksandrov, V. G. Khlyustov, I. A. Flerov and N. V. Beznosikova. 14(11), 2853–5 (May 1973); CPM-7305D1081

Aleksandrov, S. B.—Impurity-Level Energies in Magnesium Phthalocyanine Films (E)—V. A. Benderskii, A. I. Belkind, M. I. Fedorov and S. B. Aleksandrov. 14(3), 674–7 (Sep. 1972); CPM-7209D0108

Alekseenko, N. N.—Diffusion and Solubility of Helium in NaCl Crystals (E)—N. N. Alekseenko, P. V. Volobuev and P. E. Suetin. 14(8), 2073–5 (Feb. 1973); CPM-7302E1199

Alekseev, A. A.—Accumulation of Dislocations in Random Fields of Internal Stresses and the Initial Stage in the Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(4), 920–6 (Oct. 1972); CPM-7210D0735

—Relationships Governing the Initial Stage of Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(9), 2440–1(C) (Mar. 1973); CPM-7303E1264

Alekseev, B. F.—Forbidden Transitions in Degenerate Spin Systems (E/T)—B. F. Alekseev and A. S. Serdyuk. 14(6), 1535–6(C) (Dec. 1972); CPM-7212D0871

Alferov, V. A.—Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Aliev, N. G.—Anisotropic Linear Expansion and the Isothermal Compressibility of a GaSe Single Crystal (E)—N. G. Aliev, I. G. Kerimov, M. M. Kurbanov and T. A. Mamedov. 14(5), 1304–5(C) (Nov. 1972); CPM-7211A1556

—Thermal Expansion and Isothermal Compressibility of Indium Chalcogenide Single Crystals (E)—N. G. Aliev, I. G. Kerimov and M. M. Kurbanov. 14(12), 3106–7(C) (Jun. 1973); CPM-7306D0948

Alikhanov, R. A.—Curie Point for Inclusions of Nickel in Synthetic Diamonds (E)—V. L. Sedov and R. A. Alikhanov. 14(4), 997–9 (Oct. 1972); CPM-7210D0812

Alishauskas, A. V.—Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, É. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

Alkeev, N. V.—Effect of Band Structure on the Recombination Mechanism of Condensed Charge Carriers in Germanium, Silicon, and Their Alloys (E/T)—Ya. E. Pokrovskii, K. I. Svistunova and N. V. Alkeev. 14(11), 2805–7 (May 1973); CPM-7305D1033

Al'shin, B. I.—Two-Dimensional Magnetic Ordering in $BaMnF_4$ (E)—R. V. Zorin, B. I. Al'shin, D. N. Astrov and A. V. Tishchenko. 14(10), 2661–2(C) (Apr. 1973); CPM-7304E1307

Al'shits, E. I.—Broadening, Profile, and Shift of Phononless Lines in the Spectra of Impure n-Paraffin Crystals Recorded in the 4.2–77°K Range (E)—E. I. Al'shits, É. D. Godyaev and R. I. Personov. 14(6), 1385–92 (Dec. 1972); CPM-7212D0721

Al'tshuler, T. S.—Observation of Electron Spin Resonance in a Type-II Superconductor (E)—T. S. Al'tshuler, I. A. Garifullin and É. G. Kharakhash'yan. 14(1), 213–4(C) (Jul. 1972); CPM-7207D1172

—Profile of the ESR Line of Localized Spins in Metals (T/E)—T. S. Al'tshuler, I. A. Garifullin, É. G. Kharakhash'yan and L. F. Shatrukov. 14(9), 2213–6 (Mar. 1973); CPM-7303E1037

Al'tshuller, V. M.—Influence of Structure Defects on the Electrical Properties and Luminescence of α-SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206

Altynbaev, R. G.—Intersecting Pile-Ups of Edge Dislocations (T)—R. G. Altynbaev and Sh. Kh. Khannanov. 14(9), 2439(C) (Mar. 1973); CPM-7303E1263

Amitin, E. B.—Influence of Pressure on the Thermodynamic Properties of NH_4Cl near the Phase Transition Point (E)—E. B. Amitin, Yu. A. Kovalevskaya and I. E. Paukov. 14(11), 2902–3(C) (May 1973); CPM-7305D1130

Ammer, S. A.—Elastic Properties and Strength of Germanium Whiskers (E)—V. S. Postnikov, S. A. Ammer and A. I. Drozhzhin. 14(10), 2636–7(C) (Apr. 1973); CPM-7304E1282

Andreev, A. A.—Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

—Electrical Conductivity of Vanadium Oxide Bronzes in the Liquid and Solid States (E)—A. A. Vinogradov, A. A. Andreev and A. I. Shelykh. 14(4), 1077–9(C) (Oct. 1972); CPM-7210D0892

—Mechanism of Migration and the Hall Effect in Liquid Semiconductors (E/T)—A. A. Andreev, M. Mamadaliev and A. R. Regel'. 14(8), 2060–5 (Feb. 1973); CPM-7302E1186

—Frequency Dispersion of the Electrical Conductivity of Liquid Selenium and Selenium–Tellurium Alloys (E)—A. A. Andreev, A. L. Manukyan, A. B. Pevtsov and L. N. Shumilova. 14(12), 3100–1 (C) (Jun. 1973); CPM-7306D0942

—Switching Effect in Molten Oxides Sb_2O_3 and B_2O_3 (E)—A. A. Andreev, S. D. Zainutdinov, B. T. Melekh, T. Turgunov and E. A. Shmuratov. 14(12), 3102–3(C) (Jun. 1973); CPM-7306D0944

Andreev, G. A.—Two Regions of Decomposition of Solid Solutions of Barium in Potassium Chloride Crystals (E)—G. A. Andreev and V. A. Klimov. 14(4), 890–3 (Oct. 1972); CPM-7210D0705

—Kinetics of Annealing of Radiation Defects in LiF Crystals (E)—G. A. Andreev. 14(5), 1327–8(C) (Nov. 1972); CPM-7211A1579

—Kinetics of Decrease in the Concentration of Nonequilibrium Cation Vacancies in $KBr:Ba^{2+}$ Crystals (E)—G. A. Andreev, L. G. Buritskova and G. B. Semushkin. 14(10), 2640–1(C) (Apr. 1973); CPM-7304E1286

Andreev, V. A.—Absorption of Light by Bound Excitons in Semiconductors (T)—V. A. Andreev and V. I. Sugakov. 14(5), 1338–9(C) (Nov. 1972); CPM-7211A1590

Andreeva, L. P.—Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

Andriesh, I. S.—Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–8 (Apr. 1973); CPM-7304E1196

Andrievskii, R. A.—Positron Annihilation in Certain Transition Metal Hydrides (E)—V. I. Sabin, R. A. Andrievskii, V. V. Gorbachev and A. D. Tsyganov. 14(11), 2815–7 (May 1973); CPM-7305D1043

Andrusich, V. A.—Conductivity of Bleached Potassium Chloride Crystals Containing Impurity Complexes (E)—Ya. N. Pershits and V. A. Andrusich. 14(12), 3096–7(C) (Jun. 1973); CPM-7306D0938

Antipin, A. A.—Compensation of the Excess Charge During Activation of Scheelites with Rare-Earth Ions (E)—R. Yu. Abdulsabirov, A. A. Antipin, I. N. Kurkin, E. A. Tsvetkov, Yu. K. Chirkin and V. I. Shlenkin. 14(1), 255–7(C) (Jul. 1972); CPM-7207D1214

Antipov, V. B.—Influence of Intense Laser Radiation on Instability Threshold of Spin Waves Excited by Parallel Pumping (E)—V. N. Agartanov, V. B. Antipov, V. V. Kolpakov and E. M. Fedorin. 14(8), 2116–7(C) (Feb. 1973); CPM-7302E1242

Antonov, A. V.—Effect of Magnetic Ordering on the Formation of the Optical Absorption Spectrum of Yttrium Iron Garnet (E/T)—A. V. Antonov and A. I. Belyaeva. 14(4), 876–80 (Oct. 1972); CPM-7210D0691

—Observation and Properties of Ring Domains in Rare-Earth Orthoferrites (E)—A. V. Antonov, A. M. Balbashov, V. A. Baltinskii and A. Ya. Chervonenkis. 14(7), 1649–52 (Jan. 1973); CPM-7301C0609

Antoshina, L. G.—Magnetic and Magnetostrictive Properties of the Ferrite $CuCr_2O_4$ (E)—K. P. Belov, A. N. Goryaga, L. G. Antoshina and Yu. F. Popov. 14(12), 3071–2(C) (Jun. 1973); CPM-7306D0913

Antsupov, Yu. A.—Dynamic Elasticity of Polyolefins (E/T)—Yu. A. Antsupov, V. P. Volodin, E. V. Kuvshinskii and Yu. N. Fedorov. 14(4), 952–4 (Oct. 1972); CPM-7210D0767

Arbuzova, T. I.—Exchange Narrowing of Paramagnetic Resonance Line in Chromium Chalcogenide Spinels (E)—A. A. Samokhvalov, V. S. Babushkin, M. I. Simonova and T. I. Arbuzova. 14(7), 1883–4(C) (Jan. 1973); CPM-7301C0843

Aref'ev, K. P.—Temperature Dependence of Positron Annihilation in a Metal (T)—A. A. Vorob'ev and K. P. Aref'ev. 14(4), 906–7 (Oct. 1972); CPM-7210D0721

Arents, R. A.—Study of the Magnetic Properties of χ and θ Iron Carbide Using Mössbauer Spectroscopy (E)—Yu. V. Maksimov, I. P. Suzdalev and R. A. Arents. 14(11), 2832–4 (May 1973); CPM-7305D1060

Arkhangel'skaya, V. A.—Coloration of PbF_2 Crystals by Irradiation and Their Electrical Properties (E)—V. A. Arkhangel'skaya, V. G. Erofeichev and M. N. Kiseleva. 14(12), 2953–5 (Jun. 1973); CPM-7306D0795

Arkhipov, Yu. V.—Energy Balance and Dynamics of Damage of Transparent Dielectrics by Laser Radiation (E)—Yu. V. Arkhipov, N. V. Morachevskii, V. V. Morozov and F. S. Faizullov. 14(6), 1510–3 (Dec. 1972); CPM-7212D0846

Armyanov, S. A.—Perpendicular Anisotropy of Electrolytic Cobalt Films Having Different Texture Perfections about the [0001] Axis (E)—S. A. Armyanov. 14(9), 2277–9 (Mar. 1973); CPM-7303E1104

Aronov, A. G.—"Optical Cooling" of Conduction Electrons in Conductors (T)—A. G. Aronov and V. L. Gurevich. 14(4), 966–70 (Oct. 1972); CPM-7210D0781

—Effect of Tunnel Extraction of Excitations from a Superconductor on the Superconducting Phase Transition (T)—A. G. Aronov and V. L. Gurevich. 14(9), 2309–11 (Mar. 1973); CPM-7303E1133
Artemenko, S. N.—Feasibility of Suppression of Gunn Domains (T)—S. N. Artemenko, R. F. Kazarinov and R. A. Suris. 14(6), 1393–9 (Dec. 1972); CPM-7212D0729
Artobolevskaya, E. S.—Electrical Conduction Mechanism in the Ferroelectric Semiconductor SbSI (E)—B. S. Artobolevskaya, E. V. Chenskii, R. S. Gvozdover and V. I. Petrov. 14(8), 1935–9 (Feb. 1973); CPM-7302E1061
Aseev, G. L.—Mechanisms for the Laser Destruction of Alkali Halide Crystals and for the Multiphoton Ionization of Impurity Centers (E/T)—G. I. Aseev and M. L. Kats. 14(5), 1122–5 (Nov. 1972); CPM-7211A1374
—Many-Photon Excitation and Ionization of Tl^+ Impurity Centers in Alkali Halide Crystals (T/E)—G. I. Aseev and M. L. Kats. 14(5), 1173–6 (Nov. 1972); CPM-7211A1425
Ashkinadze, B. M.—Recombination Radiation from High-Density Exciton Systems in Silicon (E)—B. M. Ashkinadze and T. Risbaev. 14(3), 596–601 (Sep. 1972); CPM-7209D0030
Asnin, V. M.—Electron—Hole Drops in Germanium (E)—V. M. Asnin, A. A. Rogachev and N. I. Sablina. 14(2), 332–5 (Aug. 1972); CPM-7208E0489
—Energy of Formation of Biexcitons in Silicon (E)—V. M. Asnin, Yu. N. Lomasov and A. A. Rogachev. 14(11), 2921–2(C) (May 1973); CPM-7305D1149
Astrelina, E. A.—Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133
Astrov, D. N.—Two-Dimensional Magnetic Ordering in $BaMnF_4$ (E)—R. V. Zorin, B. I. Al'shin, D. N. Astrov and A. V. Tishchenko. 14(10), 2661–2(C) (Apr. 1973); CPM-7304E1307
Avdonin, V. Ya.—Elastic Wave Damping in Cubic Crystals According to the Akhiezer Mechanism (E)—V. Ya Avdonin, V. V. Lemanov, I. A. Smirnov and V. V. Tikhonov. 14(3), 747–52 (Sep. 1972); CPM-7209D0181
Averkin, A. A.—Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14(4), 971–4 (Oct. 1972); CPM-7210D0786
Avilov, V. V.—Calculation of the Madelung Constant of Crystals (T)—V. V. Avilov. 14(9), 2209–12 (Mar. 1973); CPM-7303E1033

B

Babenko, S. D.—Experimental Investigation of the Frequency Dependence of Photoelectric Emission from Metals (E)—S. D. Babenko, T. S. Rudenko, V. A. Benderskii and Ya. M. Zolotovitskii. 14(12), 2950–2 (Jun. 1973); CPM-7306D0792
Babko, V. A.—Influence of Internal Stresses on Magnetic Birefringence of Yttrium Ferrite Garnet (E)—V. A. Babko and V. D. Tron'ko. 14(9), 2426–7(C) (Mar. 1973); CPM-7303E1250
Babushkin, V. S.—Exchange Narrowing of Paramagnetic Resonance Line in Chromium Chalcogenide Spinels (E)—A. A. Samokhvalov, V. S. Babushkin, M. I. Simonova and T. I. Arbuzova. 14(7), 1883–4(C) (Jan. 1973); CPM-7301C0843
Bachinin, Yu. G.—Negative Photoconductivity in Semiconductors (T)—Yu. G. Bachinin and Yu. V. Gulyaev. 14(4), 1092–3(C) (Oct. 1972); CPM-7210D0907
Badalyan, D. A.—Theory of Ordering in Multicomponent Solid Solutions (T)—D. A. Badalyan and A. G. Khachaturyan. 14(9), 2270–3 (Mar. 1973); CPM-7303E1094
Baddur, A.—Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700
Badilenko, N. A.—Investigation of the Kinetics of Dislocation Motion in Silicon (E)—N. N. Novikov, N. A. Badilenko and O. P. Butchenko. 14(5), 1356–8(C) (Nov. 1972); CPM-7211A1608
Bagdanskii, N. I.—Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskii, E. I. Balabanov and A. I. Vasil'ev. 14(12), 3028–31 (Jun. 1973); CPM-7306D0870
Bagduev, G. B.—Internal Friction in Pure Tellurium Single Crystals (E)—G. B. Bagduev, A. M. Magdiev, E. K. Naimi and N. A. Tyapunina. 14(10), 2650–1(C) (Apr. 1973); CPM-7304E1296
Bagmut, N. N.—Electron–Nuclear Double Resonance of the Triplet State of M Centers in KCl (E/T)—Yu. V. Fedotov, N. N. Bagmut and I. V. Matyash. 14(2), 519–20(C) (Aug. 1972); CPM-7208E0676
Bairamov, B. Kh.—Self-Focusing of the Radiation of an Argon Laser in $Bi_{12}GeO_{20}$ by Means of Raman Scattering (E)—B. Kh. Bairamov, B. P. Zakharchenya and Z. M. Khashkhozhev. 14(5), 1181–8 (Nov. 1972); CPM-7211A1433
—Scattering of Light by Optical Phonons in $Bi_{12}SiO_{20}$ Crystals (E)—B. Kh. Bairamov, I. S. Rez, Z. M. Khashkhozhev and V. I. Tsanev. 14(6), 1473–6 (Dec. 1972); CPM-7212D0809
—Self-Focusing of Argon–Laser Radiation in $Bi_{12}SiO_{20}$ Crystals (E)—B. Kh. Bairamov, B. P. Zakharchenya and Z. M. Khashkhozhev. 14(9), 2357–62 (Mar. 1973); CPM-7303E1181
Bakaev, V. A.—Determination of the Parameters of Dipole–Dipole and Quadrupole Interactions (T)—V. A. Bakaev. 14(9), 2434–5(C) (Mar. 1973); CPM-7303E1258
Bakhadyrkhanov, M. K.—Diffusion, Electrotransport, and Solubility of Manganese Impurities in Silicon (E)—M. K. Bakhadyrkhanov, B. I. Boltaks and G. S. Kulikov. 14(6), 1441–4 (Dec. 1972); CPM-7212D0777
Bakhtibaev, A. N.—Mosaic Structure of Germanium in Longevity and Creep Testing (E)—A. N. Bakhtibaev, V. I. Betekhtin, S. A. Ivanov, M. M. Myshlyaev and I. I. Khodos. 14(1), 117–21 (Jul. 1972); CPM-7207D1076
Bakhtizin, R. Z.—Influence of the Adsorption of SiO Molecules on the Field Emission of Electrons from p-Type Germanium (E)—R. Z. Bakhtizin and V. I. Stepanov. 14(1), 245–6(C) (Jul. 1972); CPM-7207D1204
—Connection Between Electrical Breakdown and the Form of the Volt—Ampere Characteristics of the Autoemission Current From p–Ge (E)—P. G. Shlyakhtenko, R. Z. Bakhtizin and N. V. Mileshkina. 14(5), 1320–2(C) (Nov. 1972); CPM-7211A1572
Bakulin, E. A.—Plasma Oscillations in Transition Metals and Alloys (T/E)—E. A. Bakulin, M. M. Bredov and V. A. Vasil'ev. 14(8), 2100–3 (Feb. 1973); CPM-7302E1226
Balabanov, E. I.—Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskii, E. I. Balabanov and A. I. Vasil'ev. 14(12), 3028–31 (Jun. 1973); CPM-7306D0870
Balagurov, B. Ya.—Dielectric Losses in Polycrystalline Solids (T)—B. Ya. Balagurov and R. O. Zaitsev. 14(1), 41–6 (Jul. 1972); CPM-7207D1000
—Dispersion of Dielectric Nonlinearity in Displacement Type Ferroelectrics (T)—B. Ya. Balagurov and M. B. Geilikman. 14(8), 2044–9 (Feb. 1973); CPM-7302E1170
Balakhonov, N. F.—Theory of Ferromagnetic Resonance in Single Crystals with Anisotropic g Factor (T)—N. F. Balakhonov, L. V. Kurbatov and A. V. Shitikov. 14(1), 101–5 (Jul. 1972); CPM-7207D1060
Balakirev, M. K.—Screw Instability in Germanium at Low Temperatures (E)—M. K. Balakirev, A. L. Belostotskii, S. V. Bogdanov and E. P. Zarubin. 14(3), 589–91 (Sep. 1972); CPM-7209D0023
Balashov, Yu. S.—Internal Friction of Aluminum Oxide Ceramics (E)—Yu. S. Balashov, V. N. Batygin, A. A. Sobolev and E. I. Puzyrev. 14(2), 563–4(C) (Aug. 1972); CPM-7208E0720
—Temperature Dependence of the Velocity of Ultrasound in Silicate Glasses at Liquid–Helium Temperatures (E)—Yu. S. Balashov and A. V. Chernyshov. 14(8), 2155–6(C) (Feb. 1973); CPM-7302E1281
Balbashov, A. M.—Observation and Properties of Ring Domains in Rare–Earth Orthoferrites (E)—A. V. Antonov, A. M. Balbashov, V. A. Baltinskii and A. Ya. Chervonenkis. 14(7), 1649–52 (Jan. 1973); CPM-7301C0609
Balkarei, Yu. I.—Indirect Exchange in Metals in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei and É. M. Épshtein. 14(1), 65–8 (Jul. 1972); CPM-7207D1024
—Coulomb Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei and É. M. Épshtein. 14(3), 632–5 (Sep. 1972); CPM-7209D0066
—Local Electron States in Domain Walls of Ferroelectrics (T)—Yu. I. Balkarei. 14(6), 1583–4(C) (Dec. 1972); CPM-7212D0919
—Effect of the Sample Boundary and Domain Walls on the Electrical Properties of Magnetic Semiconductors (T)—Yu. I. Balkarei and L. N. Bulaevskii. 14(8), 2081–4 (Feb. 1973); CPM-7302E1207

—Features of the Phase Transition in Magnetic Semiconductors Having a Narrow Forbidden Band (T)—Yu. I. Balkarei and V. G. Baru. 14(11), 2773–5 (May 1973); CPM-7305D1001
—Resonant Dynamic Breakdown of Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei, V. V. Pavlovich and É. M. Épshtein. 14(11), 2799–801 (May 1973); CPM-7305D1027
Baltinskii, V. A.—Observation and Properties of Ring Domains in Rare-Earth Orthoferrites (E)—A. V. Antonov, A. M. Balbashov, V. A. Baltinskii and A. Ya. Chervonenkis. 14(7), 1649–52 (Jan. 1973); CPM-7301C0609
Baptizmanskii, V. V.—Paramagnetic Centers Produced by Mechanical Destruction of Silica (E/T)—K. A. Akhmed-zade, V. V. Baptizmanskii, V. A. Zakrevskii and É. B. Tomashevskii. 14(2), 351–4 (Aug. 1972); CPM-7208E0508
Baranov, P. G.—Mechanism of Radiation-Induced Coloring of KCl:Ag Crystals (E/T)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(3), 753–6 (Sep. 1972); CPM-7209D0187
—Investigation of Silver Atoms in Mixed Alkali Halide Crystals (E)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(6), 1488–92 (Dec. 1972); CPM-7212D0824
—Off-Center Position of Mn^+ Ions in KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov, N. I. Mel'nikov and N. G. Romanov. 14(7), 1842–3(C) (Jan. 1973); CPM-7301C0802
—Acentric Position of Silver Anions in a KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov and N. I. Mel'nikov. 14(7), 1876–8(C) (Jan. 1973); CPM-7301C0836
Bardyshev, I. I.—Influence of Illumination on the Lifetime of Positrons in Silver Halide Crystals (E)—I. I. Bardyshev, V. I. Gol'danskii and A. D. Mokrushin. 14(3), 803–4(C) (Sep. 1972); CPM-7209D0237
Bartenev, G. M.—Positronium Atom in Ionic Crystals with NaCl-Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14(3), 608–12 (Sep. 1972); CPM-7209D0042
Baru, V. G.—Features of the Phase Transition in Magnetic Semiconductors Having a Narrow Forbidden Band (T)—Yu. I. Balkarei and V. G. Baru. 14(11), 2773–5 (May 1973); CPM-7305D1001
Bar'yakhtar, V. G.—Ground State and Phase Transition in a Ferromagnetic Plate Subjected to a Magnetic Field (T)—V. G. Bar'yakhtar and A. G. Kvirikadze. 14(2), 549–50(C) (Aug. 1972); CPM-7208E0706
—Parametric Excitation of Hypersound in Ferromagnets (T)—A. I. Akhiezer, V. G. Bar'yakhtar and A. G. Kvirikadze. 14(3), 757–9 (Sep. 1972); CPM-7209D0191
—Theory of Intermediate States in Antiferromagnets (T)—V. G. Bar'yakhtar, V. F. Klepikov, V. A. Popov and E. P. Stefanovskii. 14(4), 955–9 (Oct. 1972); CPM-7210D0770
—Phase Transitions in Polarized Media and the Role of the Inhomogeneous State (T)—V. G. Bar'yakhtar and V. F. Klepikov. 14(5), 1267–71 (Nov. 1972); CPM-7211A1519
—Effect of Singularities in the Density of Electron States on the Thermodynamics of a Normal Metal (T)—V. G. Bar'yakhtar, V. V. Gann and V. I. Makarov. 14(6), 1477–80 (Dec. 1972); CPM-7212D0813
—Operation of a Frank–Read Source in a Superconductor (T)—V. G. Bar'yakhtar, E. I. Druinskii and I. I. Fal'ko. 14(7), 1707–10 (Jan. 1973); CPM-7301C0667
—Critical Scattering of Neutrons in Ferrites and Antiferromagnets in a Magnetic Field (T)—V. G. Bar'yakhtar, V. V. Tarasenko and D. A. Yablonskii. 14(8), 2006–9 (Feb. 1973); CPM-7302E1132
—Instability of Uniform Oscillations of the Magnetic Moment of a Ferromagnet (T)—V. G. Bar'yakhtar, B. A. Ivanov and A. G. Kvirikadze. 14(9), 2385–6(C) (Mar. 1973); CPM-7303E1209
—Coupled Magnetoelastic Waves in Ferrites in Applied Magnetic Fields (T)—V. G. Bar'yakhtar and D. A. Yablonskii. 14(12), 3044–7 (Jun. 1973); CPM-7306D0886
Baryshev, N. S.—Quantum Efficiency in Semiconductors with Kane-Type Band Structure (T)—N. S. Baryshev, K. Ya. Shtivel'man and M. P. Shchetinin. 14(9), 2344–7 (Mar. 1973); CPM-7303E1168
Baryshevskii, V. G.—Comments on the Theory of Impurity Levels (T)—V. G. Baryshevskii. 14(10), 2610(C) (Apr. 1973); CPM-7304E1256
Bashirov, F. I.—Influence of Molecule Symmetry on Random Reorientations in Solids (T)—M. M. Bil'danov, F. I. Bashirov and R. A. Dautov. 14(2), 528–9(C) (Aug. 1972); CPM-7208B0685
—Orientational Quadrupolar Relaxation in NMR Crystals (T)—Yu. L. Popov, N. K. Gusin, F. I. Bashirov, K. S. Saikin and R. A. Dautov. 14(5), 1199–202 (Nov. 1972); CPM-7211A1451
Bashkirov, Sh. Sh.—Magnetic Sublattices in Nonstoichiometric Manganese–Zinc Ferrites (E)—Sh. Sh. Bashkirov, A. B. Liberman and V. I. Sinyavskii. 14(11), 2776–8 (May 1973); CPM-7305D1004
Bass, F. G.—Analogy between a Relativistic Plasma and the Electron Gas of a Semiconductor with a Nonquadratic Dispersion Law (T)—F. G. Bass and V. A. Pogrebnyak. 14(6), 1518–20 (Dec. 1972); CPM-7212D0854
Batygin, V. N.—Internal Friction of Aluminum Oxide Ceramics (E)—Yu. S. Balashov, V. N. Batygin, A. A. Sobolev and É. I. Puzyrev. 14(2), 563–4(C) (Aug. 1972); CPM-7208E0720
Batygov, S. Kh.—Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654
—Recombination Luminescence in the Crystals $Y_3Al_5O_{12}$–TR_1, TR_2 (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker and V. V. Osiko. 14(7), 1820–2 (Jan. 1973); CPM-7301C0780
Bayakov, O. A.—Crystal Electric Fields in Cadmium–Cobalt and Cadmium–Nickel Ferrites–Spinels (E/T)—O. A. Bayukov, V. P. Ikonnikov, G. N. Il'inova and G. P. Popov. 14(8), 2040–3 (Feb. 1973); CPM-7302E1166
Begrambekov, L. B.—Anisotropy of the Energy Spectra of Electrons Emitted as a Result of Proton Bombardment of Molybdenum (E/T)—L. B. Begrambekov, S. K. Zhdanov and V. G. Tel'kovskii. 14(12), 3075–6(C) (Jun. 1973); CPM-7306D0917
Bekkauer, N. N.—Electromechanical Effect on Ionic Crystals (E)—N. V. Zagoruiko, V. I. Savenko and N. N. Bekkauer. 14(8), 2120–2(C) (Feb. 1973); CPM-7302E1246
Bekker, Ya. M.—Effect of Mechanical Stress on the Shapes of Dislocation Etch Pits in Silicon (E)—V. A. Mal'tseva, B. D. Platonov, S. Yu. Sofronova and Ya. M. Bekker. 14(4), 1053–4(C) (Oct. 1972); CPM-7210D0868
Belevtsev, B. I.—Transformation of the "Amorphous" Phase of Bismuth Thin Films into the Crystalline Phase at Small Thicknesses (E)—B. I. Belevtsev, Yu. F. Komnik and L. A. Yatsuk. 14(7), 1887–8(C) (Jan. 1973); CPM-7301C0847
—Phase Transitions in Thin Gallium Films Produced by Low-Temperature Condensation (E/T)—B. I. Belevtsev and Yu. F. Komnik. 14(11), 2759–61 (May 1973); CPM-7305D0987
Belikov, A. M.—Investigation of the Dislocation Structure of Stretch-Deformed Copper Whiskers by Analysis of Lattice Disorientations (E)—V. S. Postnikov, A. M. Belikov, A. T. Kosilov and V. B. Shepilov. 14(6), 1529–30(C) (Dec. 1972); CPM-7212D0865
Belkind, A. I.—Impurity-Level Energies in Magnesium Phthalocyanine Films (E)—V. A. Benderskii, A. I. Belkind, M. I. Fedorov and S. B. Aleksandrov. 14(3), 674–7 (Sep. 1972); CPM-7209D0108
Belogolovskii, M. A.—Behavior of Alkali Atoms Introduced into the Xenon Lattice (T)—M. A. Belogolovskii and K. B. Tolpygo. 14(10), 2571–4 (Apr. 1973); CPM-7304E1217
Belostotskii, A. L.—Screw Instability in Germanium at Low Temperatures (E)—M. K. Balakirev, A. L. Belostotskii, S. V. Bogdanov and E. P. Zarubin. 14(3), 589–91 (Sep. 1972); CPM-7209D0023
Belousova, E. A.—Influence of Structure Defects on the Electrical Properties and Luminescence of α-SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206
Belov, K. P.—Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Ledneva, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158
—Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shiyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247
—Anomalies in the Coercive Force in the Compensation Temperature Region in Ferrite Spinels (E)—K. P. Belov, A. N. Goryaga and T. Ya. Gridasova. 14(5), 1225–7 (Nov. 1972); CPM-7211A1477

—Distinguishing Features of Magnetic Properties of Single-Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1558

—Magnetostriction of Cerium-Substituted Yttrium Iron Garnets (E)—K. P. Belov, N. V. Volkova, V. I. Raitsis and A. Ya. Chervonenkis. 14(6), 1607–9(C) (Dec. 1972); CPM-7212D0943

—Magnetic Properties of Copper-Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

—Magnetic and Magnetostrictive Properties of the Ferrite $CuCr_2O_4$ (E)—K. P. Belov, A. N. Goryaga, L. G. Antoshina and Yu. F. Popov. 14(12), 3071–2(C) (Jun. 1973); CPM-7306D0913

Belov, V. P.—Effect of Number of Fe^{3+} Exchange Linkages on Local Magnetic Fields at Fe^{57} Nuclei in the System $YFe_{1-x}Al_xO_3$ (E/T)—V. F. Belov, T. A. Khimich, M. N. Shipko and M. I. Dakhis. 14(2), 437–40 (Aug. 1972); CPM-7208E0594

Belova, L. A.—Positive Temperature Coefficient of Resistance in Doped Lead Titanate (E)—Yu. I. Gol'tsov, O. I. Prokopalo and L. A. Belova. 14(3), 805–6(C) (Sep. 1972); CPM-7209D0239

Belova, V. M.—"Magnetic Anomalies" in the Mössbauer Effect (T)—V. M. Belova and V. I. Nikolaev. 14(1), 111–6 (Jul. 1972); CPM-7207D1070

—"Magnetic Anomaly" of the Probability of the Mössbauer Effect in Invar (E)—V. M. Belova, E. A. Brychkov, E. K. Zakharov, V. I. Nikolaev and S. S. Yakimov. 14(9), 2404–5(C) (Mar. 1973); CPM-7303E1228

Belozerskii, G. N.—Nuclear-Gamma-Resonance Study of the Magnetic Anisotropy of Yttrium Iron Garnet (E/T)—G. N. Belozerskii, Yu. P. Khimich and Yu. M. Yakovlev. 14(4), 993–6 (Oct. 1972); CPM-7210D0808

Belyaev, L. M.—Angular Spin Configurations in $MnCrFeO_4$ (E)—I. S. Lyubutin, T. V. Dmitrieva and L. M. Belyaev. 14(10), 2579–80 (Apr. 1973); CPM-7304E1225

Belyaeva, A. I.—Effect of Magnetic Ordering on the Formation of the Optical Absorption Spectrum of Yttrium Iron Garnet (E/T)—A. V. Antonov and A. I. Belyaeva. 14(4), 876–80 (Oct. 1972); CPM-7210D0691

Belyakov, Yu. I.—Cooperative Adsorption of Hydrogen and Deuterium on the (111) Faces of Germanium and Silicon (E)—Yu. I. Belyakov, N. I. Ionov and T. N. Kompaniets. 14(10), 2567–70 (Apr. 1973); CPM-7304E1213

Belyanchikova, M. A.—Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Ledneva, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158

—Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

Benderskii, V. A.—Impurity-Level Energies in Magnesium Phthalocyanine Films (E)—V. A. Benderskii, A. I. Belkind, M. I. Fedorov and S. B. Aleksandrov. 14(3), 674–7 (Sep. 1972); CPM-7209D0108

—Experimental Investigation of the Frequency Dependence of Photoelectric Emission from Metals (E)—S. D. Babenko, T. S. Rudenko, V. A. Benderskii and Ya. M. Zolotovitskii. 14(12), 2950–2 (Jun. 1973); CPM-7306D0792

Bendik, O. G.—Model of the Ferroelectric Mode (T)—O. G. Bendik. 14(4), 849–56 (Oct. 1972); CPM-7210D0664

Bentsa, V. M.—Photoemission Studies of Oxyhalide Crystals of Bismuth (E)—V. M. Bentsa, M. V. Shtilikha, D. V. Chepur, Yu. Yu. Kampi and V. V. Matyashevskii. 14(3), 671–3 (Sep. 1972); CPM-7209D0105

Bercha, D. M.—Conductivity, Thermoelectric Properties, and Band Structure of Crystalline BiSeI (E/T)—D. M. Bercha and M. P. Zayachkovskii. 14(3), 766–7(C) (Sep. 1972); CPM-7209D0200

—Domain Structure and Local States in SbSI Type Semiconductor—Ferroelectrics (T)—D. M. Bercha, A. A. Kikineshi, D. G. Semak and D. V. Chepur. 14(5), 1359–60(C) (Nov. 1972); CPM-7211A1611

—Two-Phonon Absorption in BiOI, BiOBr, and BiOCl Single Crystals (E/T)—G. D. Puga, A. N. Borets, D. M. Bercha and M. V. Shtilikha. 14(7), 1830–1(C) (Jan. 1973); CPM-7301C0790

Berchenko, N. N.—Quantum Oscillations of the Magnetoresistance of $Cd_xHg_{1-x}Te$ (E)—N. N. Berchenko, V. E. Krevs and M. V. Pashkovskii. 14(9), 2447–8(C) (Mar. 1973); CPM-7303E1271

Berdyshev, A. A.—Indirect Exchange Interaction Involving Photoelectrons (T)—A. A. Berdyshev and B. M. Letfulov. 14(7), 1824–5(C) (Jan. 1973); CPM-7301C0784

Berezhinskii, L. I.—Some Features of Exciton Effects in Layer Crystals (T/E)—M. P. Lisitsa, A. M. Yaremko, G. G. Tarasov, M. Ya. Valakh and L. I. Berezhinskii. 14(11), 2744–7 (May 1973); CPM-7305D0972

Berezkhova, G. V.—"Deformation Memory" in Crystals (E/T)—V. G. Govorkov, G. V. Berezkhova, V. R. Regel' and E. P. Kozlovskaya. 14(2), 546(C) (Aug. 1972); CPM-7208E0703

Berezhnoi, A. A.—Electrooptical Effect in Ferroelectric Crystals Having a Smeared Phase Transition (E/T)—A. A. Berezhnoi. 14(7), 1756–60 (Jan. 1973); CPM-7301C0716

—Longitudinal Electrooptic Effect in Lead Magnoniobate Crystals (E)—A. A. Berezhnoi. 14(9), 2230–3 (Mar. 1973); CPM-7303E1054

Berezin, A. A.—Poole-Frenkel Effect in β Rhombohedral Boron (E)—A. A. Berezin, V. K. Zaitsev, M. M. Kazanin and E. N. Tkalenko. 14(9), 2445–6(C) (Mar. 1973); CPM-7303E1269

Berezin, D. G.—Ferrite Film as a Phase Diffraction Grating (E)—D. G. Berezin, T. A. Dunaeva-Mitlina and B. V. Khramov. 14(8), 2157–8(C) (Feb. 1973); CPM-7302E1283

Berezovskii, E. L.—Channeling Effects in the Scattering of 50-keV Electrons in Thin Copper Crystals (E)—Yu. S. Korobochko, E. L. Berezovskii, B. D. Grachev, S. S. Kozlovskii and V. I. Mineev. 14(11), 2812–4 (May 1973); CPM-7305D1040

Berman, I. V.—Superconducting Properties of Tellurium at Pressures up to 260 kbar (E)—I. V. Berman, Zh. I. Bynzarov and Yu. P. Kurkin. 14(9), 2192–4 (Mar. 1973); CPM-7303E1016

Berozashvili, Yu. N.—Electroabsorption in CdTe (E/T)—R. M. Akopyan, Yu. N. Berozashvili, A. V. Dundua and D. Sh. Lordkipanidze. 14(3), 801–2(C) (Sep. 1972); CPM-7209D0235

—Influence of Uniaxial Compression on the Anisotropy of the Electroabsorption of Light in GaAs (E)—Yu. N. Berozashvili, O. V. Gogolin and D. Sh. Lordkipanidze. 14(11), 2926–7(C) (May 1973); CPM-7305D1154

Bershtein, V. A.—Effect of Form of Inelastic Deformation on Intermolecular Reaction in Polymers (E/T)—V. A. Bershtein, N. A. Kalinina, S. V. Savin and V. A. Stepanov. 14(4), 975–7 (Oct. 1972); CPM-7210D0790

—Influence of Mechanical Stresses on the Hydrolysis of Bonds on the Surface of Glass (E)—V. A. Bershtein, Yu. N. Movchan and V. V. Nikitin. 14(9), 2422–3(C) (Mar. 1973); CPM-7303E1246

Bersuker, I. B.—Profile of the Optical Absorption and Luminescence Bands in Systems Exhibiting the Renner Effect (T)—V. P. Khlopin, B. S. Tsukerblat, Yu. B. Rozenfel'd and I. B. Bersuker. 14(4), 908–14 (Oct. 1972); CPM-7210D0723

Betekhtin, V. I.—Mosaic Structure of Germanium in Longevity and Creep Testing (E)—A. N. Bakhtibaev, V. I. Betekhtin, S. A. Ivanov, M. M. Myshlyaev and I. I. Khodos. 14(1), 117–21 (Jul. 1972); CPM-7207D1076

Bezdetnyi, N. M.—Influence of Nonequilibrium Carriers on the Domain Structure of the Ferroelectric Semiconductor SbSI (E)—B. S. Agaronov, N. M. Bezdetnyi, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(1), 205–6(C) (Jul. 1972); CPM-7207D1164

—Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634

—Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Beznosikova, N. V.—Thermal Capacity of the Ferroelectric $NaNH_4SeO_4.2H_2O$ (E/T)—K. S. Aleksandrov, V. G. Khlyustov, I. A. Flerov and N. V. Beznosikova. 14(11), 2853–5 (May 1973); CPM-7305D1081

Bezruchko, V. M.—Periodic Dichroism of Colored Alkali Halide Crystals Introduced by Plastic Deformation (E)—V. M. Bezruchko. 14(10), 2527–30 (Apr. 1973); CPM-7304E1173

Bikkin, Kh. M.—Effect of Elastic Scattering on the Resonant Increase in the Kinetic Temperature under ESR Saturation Conditions (T)—V. P. Kalashnikov and Kh. M. Bikkin. 14(6), 1567–8(C) (Dec. 1972); CPM-7212D0903

Bil'danov, M. M.—Influence of Molecule Symmetry on Random Reorientations in Solids (T)—M. M. Bil'danov, F. I. Bashirov and R. A. Dautov. 14(2), 528–9(C) (Aug. 1972); CPM-7208E0685

Bir, G. L.—EPR of Mn^{2+} Ions in Lithium Metavanadate (E/T)—G. L. Bir, L. V. Dmitrieva and S. A. Kizhaev. 14(1), 18–21 (Jul. 1972); CPM-7207D0977

—Exchange Interaction and Zeeman Effect for an Exciton Bound to an Ionized Center in CdSe (T/E)—G. L. Bir, B. S. Razbirin and I. N. Ural'tsev. 14(2), 360–7 (Aug. 1972); CPM-7208E0517

—Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14 (3), 732–7 (Sep. 1972); CPM-7209D0166

Birkle, G. V. B.—Reflection of $Eu_{1-x}Gd_xO$ Single Crystals in the Visible and Infrared Spectra (E/T)—A. A. Samokhvalov, G. P. Skornyakov, N. N. Loshkareva, G. V. B. Birkle, M. I. Simonova and T. P. Chukina. 14(5), 1177–80 (Nov. 1972); CPM-7211A1429

Blazha, M. G.—Shape of Paramagnetic Resonance Lines in Disordered Systems (T)—M. G. Blazha and A. B. Roitsin. 14(2), 416–20 (Aug. 1972); CPM-7208E0573

—Defect Distribution near a Paramagnetic Center (T/E)—M. G. Blazha, A. A. Bugai, V. M. Maksimenko and A. B. Roitsin. 14(7), 1779–82 (Jan. 1973); CPM-7301C0739

Blinov, A. M.—Optical Phonons in a System of $Zn_xCd_{1-x}Te$ Mixed Crystals (E)—L. K. Vodop'yanov, E. A. Vinogradov, A. M. Blinov and V. A. Rukavishnikov. 14(1), 219–20(C) (Jul. 1972); CPM-7207D1178

Blinov, L. M.—Stark Effect and Charge-Transfer States in Organic Semiconductors (E)—L. M. Blinov and N. A. Kirichenko. 14(8), 2163–4(C) (Feb. 1973); CPM-7302E1289

—Surface "Pyroelectric" Effect in Insulating Films (T/E)—L. M. Blinov, S. V. Ermakov and L. M. Korolev. 14(12), 3073–4(C) (Jun. 1973); CPM-7306D0915

Blistanov, A. A.—Decompostion of Impurity Associations in Lithium Fluroide Single Crystals (E)—A. A. Blistanov, A. N. Pavlov and M. P. Shaskol'skaya. 14(4), 1051–2(C) (Oct. 1972); CPM-7210D0866

—Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Blokhin, M. A.—Experimental Confirmation of Certain Many-Electron Processes (E)—M. A. Blokhin, E. G. Orlova and I. G. Shveitser. 14(8), 2146–7(C) (Feb. 1973); CPM-7302E1272

Blonskii, I. V.—Piezooptic Investigations of the Exciton Spectrum of CdS (E)—M. S. Brodin, I. V. Blonskii, N. A. Davydova and M. I. Strashnikova. 14(11), 2841–4 (May 1973); CPM-7305D1069

Bobudaev, A. Ya.—Electron Scattering by Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14 (7), 1864–5(C) (Jan. 1973); CPM-7301C0824

—Orientation Effects of β-Particle Scattering in Large-Thickness Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14(11), 2808–11 (May 1973); CPM-7305D1036

Bobykin, B. V.—Secondary Electron Emission from Radioactive Precipitates (E)—B. V. Bobykin, S. K. Lyubov and Yu. A. Nevinnyi. 14(11), 2912–3(C) (May 1973); CPM-7305D1140

Bogdanov, A. A.—Magnetic Anisotropy in Basal Plane of Hematite (E)—A. A. Bogdanov. 14(11), 2845–8 (May 1973); CPM-7305D1073

Bogdanov, S. V.—Screw Instability in Germanium at Low Temperatures (E)—M. K. Balakirev, A. L. Belostotskii, S. V. Bogdanov and E. P. Zarubin. 14(3), 589–91 (Sep. 1972); CPM-7209D0023

Bogolyubov, N. A.—Sublimation of Cobalt in the Temperature Range Including the Curie Point (1320–1410°K) (E)—V. O. Khandros and N. A. Bogolyubov. 14(6), 1592–3(C) (Dec. 1972); CPM-7212D0928

Bogomolov, A. A.—Relationship between Illumination-Induced Multiple Domains in SbSI Crystals and Elements of the Hysteresis Loop (E)—V. M. Rudyak, A. A. Bogomolov and V. V. Ivanov. 14 (9), 2390–2(C) (Mar. 1973); CPM-7303E1214

—Relationship between the Barkhausen Effect and the State of Defects in Ferroelectric Semiconductor SbSI (E)—V. M. Rudyak, A. A. Bogomolov, V. V. Ivanov and A. I. Yanter. 14(10), 2646–7 (C) (Apr. 1973); CPM-7304E1292

Bogomolov, V. N.—Electrical Conductivity and Thermal EMF of Finely Dispersed Reduced Rutile (TiO_2) (E)—V. N. Bogomolov and E. M. Sher. 14(3), 567–9 (Sep. 1972); CPM-7209D0001

—Nonwetting Liquids in Ultrafine Channels (E)—V. N. Bogomolov. 14(4), 1048–50(C) (Oct. 1972); CPM-7210D0863

—Magnetic Characteristics of Superconducting Mercury in Chrysotile Asbestos (E)—V. N. Bogomolov and V. K. Krivosheev. 14(4), 1059–60(C) (Oct. 1972); CPM-7210D0874

—Superconductivity of Mercury in Channels of a NaX Zeolite (E)—V. N. Bogomolov. 14(5), 1361–3(C) (Nov. 1972); CPM-7211A1613

—Mössbauer Effect at ^{119}Sn Impurity Atoms in Gallium in Porous Glass (E)—V. N. Bogomolov, N. A. Khushin and P. P. Seregin. 14 (7), 1729–31 (Jan. 1973); CPM-7301C0689

—Possibility of Electromagnetic Radiation During Phase Transitions (T)—V. N. Bogomolov, E. K. Kudinov and Yu. A. Firsov. 14(7), 1788–90 (Jan. 1973); CPM-7301C0748

—Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Khushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

Boiko, A. A.—Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

Boiko, B. T.—Magnetoresistance of Island Films of Metals on Insulators (E)—B. T. Boiko, L. S. Palatnik, V. P. Kopach and S. B. Melent'ev. 14(4), 1090–1(C) (Oct. 1972); CPM-7210D0905

Boiko, V. S.—Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744

Boiko, Yu. L.—Reduction in the Optical Strength of Transparent Solids Containing Macroscopic Defects (E)—Yu. E. Geguzin, A. K. Emets and Yu. I. Boiko. 14(5), 1350–1(C) (Nov. 1972); CPM-7211A1602

Bokov, V. A.—Effective Magnetic Fields at Sn^{119} Nuclei in Some Magnetically Ordered Perovskites (E)—V. A. Bokov, G. V. Popov, N. N. Parfenova and G. G. Yushina. 14(1), 83–6 (Jul. 1972); CPM-7207D1042

—Mössbauer Determination of Orientation of Spins in the Tetrahedral Sublattice of $Bi_2Fe_4O_9$ (E/T)—V. A. Bokov, A. S. Kamzin and G. Ya. Karapet'yan. 14(8), 2168–70(C) (Feb. 1973); CPM-7302E1294

—Mössbauer and Neutron-Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

Bolchok, O. I.—Decreased Dislocation Density in Crystals Due to the Effect of Ultrasonic Vibrations (E)—I. A. Gindin, O. I. Bolchok, G. N. Malik and I. M. Neklyudov. 14(7), 1828–9(C) (Jan. 1973); CPM-7301C0788

Bol'shakov, A. I.—Diffusion Processes in Irradiated Molecular Crystals (E/T)—A. I. Mikhailov, A. I. Bol'shakov, Ya. S. Lebedev and V. I. Gol'danskii. 14(4), 1000–6 (Oct. 1972); CPM-7210D0815

Bol'shov, L. A.—Surface Faceting of Single Crystals (T)—L. A. Bol'shov and A. A. Vedenov. 14(4), 864–7 (Oct. 1972); CPM-7210D0679

—Filamentary Model of a Superconductor in a Porous Material (T)—Yu. Yu. Abramov, L. A. Bol'shov and V. A. Roslyakov. 14(8), 1926–30 (Feb. 1973); CPM-7302E1052

Bol'shutkin, D. N.—Influence of Zero Energy on the Plastic Deformation of Hydrogen (E)—Yu. E. Stetsenko, D. N. Bol'shutkin, L. A. Indan and A. A. Khudoteplaya. 14(1), 149–51 (Jul. 1972); CPM-7207D1108

Boltaks, B. I.—Diffusion, Electrotransport, and Solubility of Manganese Impurities in Silicon (E)—M. K. Bakhadyrkhanov, B. I. Boltaks and G. S. Kulikov. 14(6), 1441–4 (Dec. 1972); CPM-7212D0777

Bondarenko, B. V.—Heat of Adsorption of Barium on (100) and (110) Faces of Tungsten and Molybdenum (E)—B. V. Bondarenko, N. D. Konovalov and E. A. Tishin. 14(12), 3078(C) (Jun. 1973); CPM-7306D0920

Bondarenko, S. I.—"Intrinsic" Steps on the Current-Voltage Characteristics of Josephson Point Contacts (E)—S. I. Bondarenko, I. M. Dmitrienko and T. P. Narbut. 14(2), 295–9 (Aug. 1972); CPM-7208E0452

Bord, B. G.—Elastic Stresses and Strains at the Interface of an Epitaxial β-Co—Cu Bicrystal (T/E)—B. G. Bord, L. S. Palatnik, A. I. Fedorenko and É. P. Fel'dman. 14(11), 2700–3 (May 1973); CPM-7305D0928

Bordovskii, V. A.—Pyroelectric Processes in Lead Monoxide (E)—V. A. Bordovskii and V. A. Izvozchikov. 14(5), 1344–5(C) (Nov. 1972); CPM-7211A1596

Borets, A. N.—Two-Phonon Absorption in BiOI, BiOBr, and BiOCl Single Crystals (E/T)—G. D. Puga, A. N. Borets, D. M. Berchа and M. V. Shtilikha. 14(7), 1830–1(C) (Jan. 1973); CPM-7301C0790

Borisov, V. T.—Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

Borodin, V. A.—Magnetostriction of Polycrystalline Holmium and Dysprosium Orthoferrites (E/T)—V. A. Borodin, A. M. Kadomtseva, N. M. Kovtun and V. A. Khokhlov. 14(8), 1950–2 (Feb. 1973); CPM-7302E1076

Borukhovich, A. S.—Heat of the Semiconductor–Metal Phase Transition in V_2O_3 (E)—V. G. Khlyustov, A. S. Borukhovich and V. A. Perelyaev. 14(7), 1848–9(C) (Jan. 1973); CPM-7301C0808

Boyarskii, L. A.—Magnetic Susceptibility of Holmium Near the Néel Point (E)—L. A. Boyarskii and M. A. Starikov. 14(6), 1588–9(C) (Dec. 1972); CPM-7212D0924

Bozhko, A. P.—Relaxation of Electrons in Dissipative Media (T)—A. P. Bozhko and K. K. Pukhov. 14(7), 1638–44 (Jan. 1973); CPM-7301C0598

Bozhovskaya, N. V.—Plasmon–Phonon Interaction in Gallium Antimonide (T/E)—N. V. Bozhovskaya and V. K. Subashiev. 14 (7), 1627–33 (Jan. 1973); CPM-7301C0587

Bredov, M. M.—Plasma Oscillations in Transition Metals and Alloys (T/E)—E. A. Bakulin, M. M. Bredov and V. A. Vasil'ev. 14(8), 2100–3 (Feb. 1973); CPM-7302E1226

Bresler, M. S.—Landau Levels in the Valence Band of Tellurium (T) —M. S. Bresler, A. S. Skal and E. B. Sonin. 14(1), 165–71 (Jul. 1972); CPM-7207D1124

Brodin, M. S.—Piezooptic Investigations of the Exciton Spectrum of CdS (E)—M. S. Brodin, I. V. Blonskii, N. A. Davydova and M. I. Strashnikova. 14(11), 2841–4 (May 1973); CPM-7305D1069

Bronshtein, I. M.—Angular Distribution of Inelastically Reflected Electrons (E)—I. M. Bronshtein, V. M. Stozharov and V. P. Pronin. 14(4), 927–30 (Oct. 1972); CPM-7210D0742

Broude, V. L.—Interaction of Excitons with Phonons in Benzene Crystals (E)—V. L. Broude and V. K. Dolganov. 14(1), 225–7(C) (Jul. 1972); CPM-7207D1184

—Luminescence Kinetics of Free and Bound Excitons in CdS Crystals (E)—V. L. Broude, I. I. Tartakovskii and V. B. Timofeev. 14(12), 2971–6 (Jun. 1973); CPM-7306D0813

Brychkov, E. A.—"Magnetic Anomaly" of the Probability of the Mössbauer Effect in Invar (E)—V. M. Belova, E. A. Brychkov, E. K. Zakharov, V. I. Nikolaev and S. S. Yakimov. 14(9), 2404–5(C) (Mar. 1973); CPM-7303E1228

Bryksin, V. V.—High–Temperature Hall Mobility in Cubic Polaron Semiconductors (T)—V. V. Bryksin and Yu. A. Firsov. 14(2), 384–6 (Aug. 1972); CPM-7208E0541

—Surface Optical Vibrations in Ionic Crystal Plates (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(2), 453–9 (Aug. 1972); CPM-7208E0610

—Nonanalytic Dependence of Current on Field in Narrow–Band Semiconductors (T)—V. V. Bryksin. 14(3), 684–91 (Sep. 1972); CPM-7209D0118

—Microscopic Theory of Surface Vibrations in Ionic Crystal Films (T) —V. V. Bryksin and Yu. A. Firsov. 14(4), 981–92 (Oct. 1972); CPM-7210D0796

Erratum: General Theory of Transport Phenomena in a Semiconductor with a Strong Electric Field [13, 2729 (1972)] (T)—V. V. Bryksin and Yu. A. Firsov. 14(6), 1615(C) (Dec. 1972); CPM-7212D0951

—Conductivity of Semiconductors in Strong Electric Fields (T)—V. V. Bryksin. 14(10), 2505–9 (Apr. 1973); CPM-7304E1151

—Surface Optical Vibrations in a Thin Film (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(11), 2849–52 (May 1973); CPM-7305D1077

—Mobility of Small Polarons in Strong Electric Fields (T)—V. V. Bryksin and Yu. A. Firsov. 14(12), 3019–27 (Jun. 1973); CPM-7306D0861

Bryzhina, M. F.—Erratum: Photoelastic Constants of Alkaline Earth Fluorides [13, 3142 (1972,12)] (E)—O. V. Shakin, M. F. Bryzhina and V. V. Lemanov. 14(5), 1370 (Nov. 1972); CPM-7211A1622

Bugai, A. A.—Temperature Variation of EPR Line Splitting of Cr^{3+} in $ZnWO_4$ by an External Electric Field (E/T)—A. A. Bugai, O. G. Duliu, V. M. Maksimenko and Yu. B. Shevchenko. 14(2), 475–6(C) (Aug. 1972); CPM-7208E0632

—Defect Distribution near a Paramagnetic Center (T/E)—M. G. Blazha, A. A. Bugai, V. M. Maksimenko and A. B. Roitsin. 14(7), 1779–82 (Jan. 1973); CPM-7301C0739

Bukhalenkov, V. V.—Acoustic Emission in a Thermoelastic Martensite Reaction (E)—R. I. Minta, V. P. Melekhin, I. Yu. Ievlev and V. V. Bukhalenkov. 14(5), 1368–9(C) (Nov. 1972); CPM-7211A1620

Bukhbinder, I. L.—Theory of Saturation of Nuclear Quadrupole Resonance (T)—I. L. Bukhbinder and A. R. Kessel'. 14(11), 2726–31 (May 1973); CPM-7305D0954

Bukhshtab, E. I.—Temperature Dependence of the Amplitude of the Quantum Oscillations of the Resistance of Thin Tin Films (E/T)—Yu. F. Komnik, E. I. Bukhshtab, Yu. V. Nikitin and Ch. Sulkovskii. 14(2), 543–5(C) (Aug. 1972); CPM-7208E0700

Bulaevskii, L. N.—Exciton Mechanism for Superconductivity (T)—L. N. Bulaevskii, Yu. V. Kopaev and Yu. A. Kukharenko. 14(1), 92–4 (Jul. 1972); CPM-7207D1051

—Optical Properties of Quasi–One–Dimensional and Quasi–Two–Dimensional Crystals (T)—L. N. Bulaevskii and Yu. A. Kukharenko. 14(8), 2076–80 (Feb. 1973); CPM-7302E1202

—Effect of the Sample Boundary and Domain Walls on the Electrical Properties of Magnetic Semiconductors (T)—Yu. I. Balkarei and L. N. Bulaevskii. 14(8), 2081–4 (Feb. 1973); CPM-7302E1207

—Thermodynamics of the Hubbard Model in the Strong–Interaction Region (T)—L. N. Bulaevskii and D. I. Khomskii. 14(12), 3015–8 (Jun. 1973); CPM-7306D0857

Burchakova, V. I.—Special Characteristics of the Thermo–EMF of Thin Bismuth Films (E)—V. I. Burchakova, D. V. Gitsu and M. I. Kozlovskii. 14(3), 775–6(C) (Sep. 1972); CPM-7209D0209

Burenkov, Yu. A.—Temperature Dependences of the Elastic Constants of Bismuth (E)—Yu. A. Burenkov, A. A. Valiev, S. P. Nikanorov and A. V. Stepanov. 14(1), 215–6(C) (Jul. 1972); CPM-7207D1174

Buritskova, L. G.—Kinetics of Decrease in the Concentration of Nonequilibrium Cation Vacancies in KBr:Ba^{2+} Crystals (E)—G. A. Andreev, L. G. Buritskova and G. B. Semushkin. 14(10), 2640–1 (C) (Apr. 1973); CPM-7304E1286

Burkanov, A. N.—Radiation of Rayleigh Waves by Edge Dislocations Emerging at the Surface of a Crystal (T)—V. D. Natsik and A. N. Burkanov. 14(5), 1111–6 (Nov. 1972); CPM-7211A1363

Burkov, V. D.—Anisotropy of the Magnetoelastic Instability in Crystals (T)—V. D. Burkov and A. V. Vashkovskii. 14(10), 2489–92 (Apr. 1973); CPM-7304E1135

Bursian, É. V.—Temperature Dependence of Carrier Mobility in Barium Titanate (E/T)—É. V. Bursian, Ya. G. Girshberg and É. N. Starov. 14(4), 872–5 (Oct. 1972); CPM-7210D0687

Butchenko, O. P.—Investigation of the Kinetics of Dislocation Motion in Silicon (E)—N. N. Novikov, N. A. Badilenko and O. P. Butchenko. 14(5), 1356–8(C) (Nov. 1972); CPM-7211A1608

Buzin, I. M.—Anomalous Behavior of the Dielectric Nonlinearity Coefficient in Strontium Titanate near the Phase Transition at 110°K (E)—I. M. Buzin, I. V. Ivanov, E. I. Rukin and V. F. Chuprakov. 14(7), 1770–3 (Jan. 1973); CPM-7301C0730

Bykov, V. N.—Influence of an External Field Thermal Hysteresis of the Magnetic Structure of Chromium (E)—V. S. Golovkin, V. N. Bykov and V. A. Levdik. 14(6), 1533–4(C) (Dec. 1972); CPM-7212D0869

Byazarov, Zh. I.—Superconducting Properties of Tellurium at Pressures up to 260 kbar (E)—I. V. Berman, Zh. I. Byazarov and Yu. P. Kurkin. 14(9), 2192–4 (Mar. 1973); CPM-7303E1016

Bystrov, M. V.—Mössbauer and Neutron–Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

C

Chaikovskii, É. F.—Effect of Dislocations on the Anomalous Transmission of X Rays in Zn and KCl Crystals (E)—É. F. Chaikovskii and L. B. Zagarii. 14(5), 1340–1(C) (Nov. 1972); CPM-7211A1592

Chaikovskii, L. A.—Multiphoton Interband Transitions in a Quantizing Magnetic Field (T)—L. A. Chaikovskii, V. A. Kovarskii and E. Yu. Perlin. 14(3), 620–4 (Sep. 1972); CPM-7209D0054

Chartorizhskii, D. N.—Spin-Wave Resonance in Thin Single-Crystal Films of Manganese Ferrite (E)—B. D. Ivanov, B. A. Kalinikos, O. A. Rybinskii and D. N. Chartorizhskii. 14(2), 561–2(C) (Aug. 1972); CPM-7208E0718

Cheban, A. G.—Thermal Conductivity of $GaAs_{1-x}P_x$ Solid Solutions (E)—L. V. Gorchak, V. V. Negreskul and A. G. Cheban. 14(9), 2382–4(C) (Mar. 1973); CPM-7303E1206

Chekin, V. V.—Dynamics of Vibrations of Sn^{119} Nuclei in Dilute Tin–Base Alloys (E)—V. V. Chekin, A. I. Velikodnyi, S. N. Glushko and E. D. Semenova. 14(2), 479–80(C) (Aug. 1972); CPM-7208E0636

Chenskii, E. V.—Electrical Conduction Mechanism in the Ferroelectric Semiconductor SbSI (E)—E. S. Artobolevskaya, E. V. Chenskii, R. S. Gvozdover and V. I. Petrov. 14(8), 1935–9 (Feb. 1973); CPM-7302E1061

—Thermodynamic Relations for the Domain Structure of Ferroelectrics (T)—E. V. Chenskii. 14(8), 1940–4 (Feb. 1973); CPM-7302E1066

Chepur, D. V.—Photoemission Studies of Oxyhalide Crystals of Bismuth (E)—V. M. Bentsa, M. V. Shtilikha, D. V. Chepur, Yu. Yu. Kampi and V. V. Matyashevskii. 14(3), 671–3 (Sep. 1972); CPM-7209D0105

—Heat Conductivity of Crystals of Bismuth Oxyhalides (E)—M. V. Shtilikha and D. V. Chepur. 14(5), 1354–5(C) (Nov. 1972); CPM-7211A1606

—Domain Structure and Local States in SbSI Type Semiconductor—Ferroelectrics (T)—D. M. Berchа, A. A. Kikineshi, D. G. Semak and D. V. Chepur. 14(5), 1359–60(C) (Nov. 1972); CPM-7211A1611

Cherednichenko, A. E.—Spectral Investigation of Auto-Photoemission from CdS Single Crystals under Pulsed and Constant Voltage Conditions (E)—B. V. Novikov, A. E. Cherednichenko and P. G. Shlyakhtenko. 14(1), 14–7 (Jul. 1972); CPM-7207D0973

Cherepanov, V. I.—Theory of the ESR Spectra of a Pair of Paramagnetic Ions Allowing for Antisymmetrical Exchange Interaction (T)—V. I. Cherepanov, S. E. Krestnikov and A. I. Krotkii. 14(8), 1990–2 (Feb. 1973); CPM-7302E1116

—Degeneracy of Spin States in Complexes of Paramagnetic Ions (T)—B. A. Men', A. N. Men' and V. I. Cherepanov. 14(12), 2931–5 (Jun. 1973); CPM-7306D0773

Cherevatskii, N. Ya.—Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583

Cherevko, V. P.—Ferromagnetic Resonance in Unsaturated Crystals of Magnetoplumbite (E)—M. A. Sigal and V. P. Cherevko. 14(1), 30–6 (Jul. 1972); CPM-7207D0989

Cherkashin, V. P.—Spectral Reversal of Dichroism in Silver Halides (E)—V. P. Cherkashin. 14(4), 1083–4(C) (Oct. 1972); CPM-7210D0898

Chernets, A. N.—Inclined Texture Axis in Zinc Oxide Films for Ultrasonic Transducers (E)—N. L. Kenigsberg and A. N. Chernets. 14(9), 2227–9 (Mar. 1973); CPM-7303E1051

Chernozatonskii, L. A.—Amplification and Generation of "Oblique" Transverse Acoustic Waves in a Hexagonal Piezosemiconductor Plate (T)—L. A. Chernozatonskii and V. M. Levin. 14(7), 1783–7 (Jan. 1973); CPM-7301C0743

—Transverse Acoustoelectric Effect (T/E)—Yu. P. Mukhortov, V. I. Pustovoit, I. S. Ravvin and L. A. Chernozatonskii. 14(9), 2300–4 (Mar. 1973); CPM-7303E1124

Chernyak, E. Ya.—Anisotropic Surface Structure Change in Refractory Metal Crystals During Directional Transport Processes (E/T)—I. V. Zakurdaev, E. Ya. Chernyak, G. N. Shuppe and V. N. Yakovlev. 14(12), 2977–80 (Jun. 1973); CPM-7306D0819

Chernyak, V. S.—Nucleation of Vacuum-Deposited Au on Thermal Oxides of Si (E)—V. I. Prokhorov, L. M. Sorokin and V. S. Chernyak. 14(5), 1323–4(C) (Nov. 1972); CPM-7211A1575

Chernyshov, A. V.—Temperature Dependence of the Velocity of Ultrasound in Silicate Glasses at Liquid–Helium Temperatures (E)—Yu. S. Balashov and A. V. Chernyshov. 14(8), 2155–6(C) (Feb. 1973); CPM-7302E1281

Chervonenkis, A. Ya.—Magnetostriction of Cerium–Substituted Yttrium Iron Garnets (E)—K. P. Belov, N. V. Volkova, V. I. Raitsis and A. Ya. Chervonenkis. 14(6), 1607–9(C) (Dec. 1972); CPM-7212D0943

—Observation and Properties of Ring Domains in Rare–Earth Orthoferrites (E)—A. V. Antonov, A. M. Balbashov, V. A. Baltinskii and A. Ya. Chervonenkis. 14(7), 1649–52 (Jan. 1973); CPM-7301C0609

—NMR Study of Spin Reorientation in the Weak Ferromagnet $ErFeO_3$ (E/T)—N. M. Kovtun, A. S. Karnachev, E. E. Solov'ev, A. Ya. Chervonenkis and A. A. Shemyakov. 14(7), 1856–8(C) (Jan. 1973); CPM-7301C0816

Chiplis, D.—Sound Amplification in n–InSb (E)—Yu. V. Ilisavskii and D. Chiplis. 14(2), 336–9 (Aug. 1972); CPM-7208E0493

—Lattice Absorption of Sound in InSb at 77°K (E/T)—Yu. V. Ilisavskii and D. Chiplis. 14(8), 2085–8 (Feb. 1973); CPM-7302E1211

Chirkin, Yu. K.—Compensation of the Excess Charge During Activation of Scheelites with Rare–Earth Ions (E)—R. Yu. Abdulsabirov, A. A. Antipin, I. N. Kurkin, E. A. Tsvetkov, Yu. K. Chirkin and V. I. Shlenkin. 14(1), 255–7(C) (Jul. 1972); CPM-7207D1214

—Spin–Lattice Relaxation of Mo^{3+} Ions in $LaNbO_4$ Single Crystals (E)—I. N. Kurkin, Yu. K. Chirkin and V. I. Shlenkin. 14(9), 2348–51 (Mar. 1973); CPM-7303E1172

—Spin–Lattice Relaxation of Co^{2+} Ions in $Na_2Zn(SO_4)_2.4H_2O$ and $Na_2Cd(SO_4)_2.2H_2O$ Single Crystals (E)—R. S. Tukhvatullin, A. A. Fedii and Yu. K. Chirkin. 14(11), 2896–7(C) (May 1973); CPM-7305D1124

Chirkina, L. A.—Influence of Slip and Mechanical Twinning on the Density of Iron (E)—I. A. Gindin, V. M. Rozenberg, Ya. D. Starodubov and L. A. Chirkina. 14(6), 1414–6 (Dec. 1972); CPM-7212D0750

Chishko, K. A.—Acoustic Emission Associated with the Annihilation of Dislocations (T)—V. D. Natsik and K. A. Chishko. 14(11), 2678–82 (May 1973); CPM-7305D0906

Chistota, A. A.—Determination of the Probability of $\Delta M_s=2$ Transitions in ESR Spectra by Microwave Saturation Method (E)—O. Ya. Grinberg, A. A. Dubinskii, B. V. Ozherel'ev, A. A. Chistota and Ya. S. Lebedev. 14(11), 2886–7(C) (May 1973); CPM-7305D1114

Chistyakov, N. S.—Effect of Boundary Conditions on the Distribution of Spins near the Surface of a Ferromagnet (T/E)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1791–3 (Jan. 1973); CPM-7301C0751

—Spin–Wave Resonance Spectrum in a Thin Ferromagnetic Layer with Mixed Boundary Conditions (T)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1826–7(C) (Jan. 1973); CPM-7301C0786

Chizhov, M. K.—Nuclear Magnetic Resonance and Weak Ferromagnetism in $FeBO_3$ (E)—M. P. Petrov, G. A. Smolenskii, A. P. Paugurt, S. A. Kizhaev and M. K. Chizhov. 14(1), 87–91 (Jul. 1972); CPM-7207D1046

—Investigation of the Structure and Magnetic Properties of $KNiPO_4$ Single Crystals (E)—A. G. Tutov, S. A. Kizhaev and M. K. Chizhov. 14(6), 1603–4(C) (Dec. 1972); CPM-7212D0939

Chokin, K. Sh.—Interpretation of the Energy–Loss Peaks in the Range 30–70 eV in the Spectra of Electrons Reflected from Transition Metals (E)—V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin and K. Sh. Chokin. 14(7), 1891–2(C) (Jan. 1973); CPM-7301C0851

Chudinova, S. A.—X–Ray Diffraction Study of Local Order in the MgO—ZnO System (E)—S. A. Chudinova and O. N. Shivrin. 14(5), 1297–301 (Nov. 1972); CPM-7211A1549

Chudnovskii, A. F.—Conditions Governing Bipolar Thermodiffusion in Semiconducting Liquids (T/E)—B. M. Mogilevskii, V. N. Sokolov and A. F. Chudnovskii. 14(10), 2531–4 (Apr. 1973); CPM-7304E1177

—Thermal Conductivity of Molten Tellurium–Selenium Alloys (E)—B. M. Mogilevskii, V. N. Sokolov and A. F. Chudnovskii. 14(10), 2658–60(C) (Apr. 1973); CPM-7304E1304

Chudnovskii, E. M.—Scattering of Electrons and Neutrons by Coupled Helicon—Magnon Waves (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(2), 387–90 (Aug. 1972); CPM-7208E0544

—Coupled Electromagnetic–Magnon Waves and Scattering of Particles in Antiferromagnetic Metals (T)—E. M. Chudnovskii. 14(4), 1035–9 (Oct. 1972); CPM-7210D0850

—Fluctuations and Scattering of Slow Neutrons by Collective Excitations of the Electron Fermi Liquid in Metals (T)—I. A. Akhiezer and E. M. Chudnovskii. 14(7), 1761–5 (Jan. 1973); CPM-7301C0721

—Low–Frequency Oscillations in Ferromagnets with Periodic Domain Structure (T)—A. S. Rozhavskii and E. M. Chudnovskii. 14(12), 3108–9(C) (Jun. 1973); CPM-7306D0950

Chugunova, M. E.—Switching Effect in Pyrolytic VO_2 Films (E)—A. G. Zhdan, A. S. Darevskii, M. E. Chugunova and I. A. Serbinov. 14(7), 1879–80(C) (Jan. 1973); CPM-7301C0839

Chukhovskii, F. N.—Experimental Investigation and Calculation of the X–Ray Diffraction Contrast of a Single Dislocation (E/T)—V. I. Polovinkina, É. V. Suvorov, F. N. Chukhovskii and A. A. Shmol'berg. 14(7), 1699–702 (Jan. 1973); CPM-7301C0659

Chukina, T. P.—Reflection of $Eu_{1-x}Gd_xO$ Single Crystals in the Visible and Infrared Spectra (E/T)—A. A. Samokhvalov, G. P. Skornyakov, N. N. Loshkareva, G. V. B. Birkle, M. I. Simonova and T. P. Chukina. 14(5), 1177–80 (Nov. 1972); CPM-7211A1429

Chumak, A. A.—Charge Density Fluctuations in Many–Valley Semiconductors in Strong Electric Fields (T)—A. A. Chumak and V. A. Shenderovskii. 14(5), 1291–3 (Nov. 1972); CPM-7211A1543

—Fluctuations in Many–Valley Semiconductors Due to Intervalley Transitions (T)—P. M. Tomchuk and A. A. Chumak. 14(8), 2031–4 (Feb. 1973); CPM-7302E1157

Chupina, L. I.—Kinetic Properties and Electron Scattering Mechanisms of Ti, Zr, and Hf at High Temperatures (T/E)—V. E. Zinov'ev, S. I. Masharov, L. I. Chupina and P. V. Gel'd. 14(4), 902–5 (Oct. 1972); CPM-7210D0717

—Transport Properties of Scandium at High Temperatures (E)—V. E. Zinov'ev, L. I. Chupina and P. V. Gel'd. 14(9), 2416–8(C) (Mar. 1973); CPM-7303E1240

Chupis, I. E.—Ferroelectric Phase Transition in a Ferroelectric–Ferromagnetic Material Subjected to a Magnetic Field (T)—I. E. Chupis and N. Ya. Plyushko. 14(11), 2907–8(C) (May 1973); CPM-7305D1135

Chuprakov, V. F.—Anomalous Behavior of the Dielectric Nonlinearity Coefficient in Strontium Titanate near the Phase Transition at 110°K (E)—I. M. Buzin, I. V. Ivanov, E. I. Rukin and V. F. Chuprakov. 14(7), 1770–3 (Jan. 1973); CPM-7301C0730

Chuprikov, G. E.—High–Temperature Transport Properties of Gadolinium (E)—V. E. Zinov'ev, L. P. Gel'd, G. E. Chuprikov and K. I. Epifanova. 14(9), 2372–4(C) (Mar. 1973); CPM-7303E1196

Churagulov, B. R.—High–Pressure Phase Transitions of the First Kind in Rochelle Salt (E)—V. P. Mylov, G. G. Leonidova and B. R. Churagulov. 14(7), 1893–4(C) (Jan. 1973); CPM-7301C0853

D

Dakhis, M. I.—Effect of Number of Fe^{3+} Exchange Linkages on Local Magnetic Fields at Fe^{57} Nuclei in the System $YFe_{1-x}Al_xO_3$ (E/T)—V. F. Belov, T. A. Khimich, M. N. Shipko and M. I. Dakhis. 14(2), 437–40 (Aug. 1972); CPM-7208E0594

Danilov, V. V.—Residual Action of High Pressure on the Width of Ferromagnetic Resonance Lines in $Y_3Fe_{5-x}Ga_xO_{12}$ Single Crystals (E)—V. A. Korchin, V. A. Ruban, V. V. Danilov and V. V. Zaporozhets. 14(5), 1329–30(C) (Nov. 1972); CPM-7211A1581

Danishevskii, A. M.—Nonlinear Absorption of IR Radiation in Indium Antimonide (E/T)—A. M. Danishevskii, S. F. Kochegarov and V. K. Subashiev. 14(11), 2754–8 (May 1973); CPM-7305D0982

Dankus, L. Z.—Anisotropy of the Thermal Expansion of InTe (E)—Yu. A. Paukshte and L. Z. Dankus. 14(5), 1316–7(C) (Nov. 1972); CPM-7211A1568

Darevskii, A. S.—Switching Effect in Pyrolytic VO_2 Films (E)—A. G. Zhdan, A. S. Darevskii, M. E. Chugunova and I. A. Serbinov. 14(7), 1879–80(C) (Jan. 1973); CPM-7301C0839

Dautov, R. A.—Influence of Molecule Symmetry on Random Reorientations in Solids (T)—M. M. Bil'danov, F. I. Bashirov and R. A. Dautov. 14(2), 528–9(C) (Aug. 1972); CPM-7208E0685

—Orientational Quadrupolar Relaxation in NMR Crystals (T)—Yu. L. Popov, N. K. Gaisin, F. I. Bashirov, K. S. Saikin and R. A. Dautov. 14(5), 1199–202 (Nov. 1972); CPM-7211A1451

Davydov, L. N.—Interaction of Neutrons and Light with Magnetoacoustic Waves in Crystals Having a Ferromagnetic–Antiferromagnetic Transition (T)—A. É. Ginzburg, L. N. Davydov and Z. A. Spol'nik. 14(7), 1774–8 (Jan. 1973); CPM-7301C0734

Davydov, S. Yu.—Temperature Dependence of the Elastic Constants for Crystals Having the Diamond Structure (T)—A. I. Gubanov and S. Yu. Davydov. 14(2), 372–6 (Aug. 1972); CPM-7208E0529

Erratum: Correction to the Papers "Temperature Dependence of the Elastic Constants for Crystals Having the Diamond Structure" and "Anharmonic Properties of Crystals Having the Zinc-Blende Lattice" [14, 372 (1972)] (T)—A. I. Gubanov and S. Yu. Davydov. 14(7), 1897(C) (Jan. 1973); CPM-7301C0857

—Anharmonic Properties of Crystals having the Zinc Blende Lattice (T)—A. I. Gubanov and S. Yu. Davydov. 14(4), 1020–3 (Oct. 1972); CPM-7210D0835

Davydova, M. D.—Effect of the Indirect Exchange Interaction on the Crystal Field Parameters of Rhombic Er^{3+} Centers in Fluorite Crystals (T/E)—I. B. Aizenberg, M. D. Davydova and A. L. Stolov. 14(11), 2710–2 (May 1973); CPM-7305D0938

Davydova, N. A.—Piezooptic Investigations of the Exciton Spectrum of CdS (E)—M. S. Brodin, I. V. Blonskii, N. A. Davydova and M. I. Strashnikova. 14(11), 2841–4 (May 1973); CPM-7305D1069

Dedegkaev, T. T.—Influence of the Decay of Si–Cu, Si–Ag, and Si–Au Solid Solutions on Defect Formation in Silicon (E)—T. D. Dzhafarov and T. T. Dedegkaev. 14(9), 2352–6 (Mar. 1973); CPM-7303E1176

Degtyar', E. P.—Fermi Surface of Cadmium under Pressure (E)—A. A. Galkin, E. P. Degtyar', S. E. Zhevago and A. I. Popovich. 14 (3), 787–8(C) (Sep. 1972); CPM-7209D0221

Degtyareva, V. F.—Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

—Superconductivity of Films of Nitrides of Several Metals and Alloys Prepared by the Electrothermal Method (E)—Yu. M. Grigor'ev, V. F. Degtyareva, A. G. Merzhanov and A. G. Rabin'kin. 14(10), 2626–7(C) (Apr. 1973); CPM-7304E1272

Deigen, M. F.—Ion–Lattice Interaction of Noncentral Ions in Cubic Crystals (T)—A. A. Karmazin, M. F. Deigen and M. D. Glinchuk. 14(1), 152–6 (Jul. 1972); CPM-7207D1111

—Scattering of Conduction Electrons by Tunneling States of Defects in Ionic Crystals (T/E)—M. F. Deigen, M. D. Glinchuk and L. A. Suslin. 14(8), 2096–9 (Feb. 1973); CPM-7302E1222

Delyagin, N. N.—Impurity Atoms of Sn^{119} in the Helicoidal Antiferromagnet Au_2Mn (E)—N. N. Delyagin, É. N. Kornienko and V. I. Nesterov. 14(6), 1590–1(C) (Dec. 1972); CPM-7212D0926

Demikhovskii, V. Ya.—Electromagnetic Excitations of Two–Component Plasma in Quantizing Magnetic Fields (T)—V. Ya. Demikhovskii and A. P. Protogenov. 14(7), 1686–94 (Jan. 1973); CPM-7301C0646

Demina, G. S.—Interaction of Stress Waves with a Boundary in an LiF Bicrystal (E)—I. S. Guz' and G. S. Demina. 14(4), 1087–8(C) (Oct. 1972); CPM-7210D0902

Dem'yanenko, V. P.—Infrared Absorption of SO_4^{2-}, CrO_4^{2-}, and SeO_4^{2-} Impurity Ions in a CsI Crystal (E)—Yu. P. Tsyashchenko and V. P. Dem'yanenko. 14(3), 791–3(C) (Sep. 1972); CPM-7209D0225

Dem'yanov, V. V.—Phase Transition in Irradiated Gadolinium Molybdate (E)—V. V. Dem'yanov and M. I. Shchedrin. 14(10), 2620–1(C) (Apr. 1973); CPM-7304E1266

Denisenko, G. A.—Effect of Spin–Lattice Relaxation and Ultrasound on the Perturbed γ–γ Angular Correlation in Paramagnets (E)—G. A. Denisenko and E. P. Khaimovich. 14(1), 106–10 (Jul. 1972); CPM-7207D1065

Denisenko, V. V.—Nonlinear Effects in the Propagation of a High–Intensity Surface Acoustic Wave in a Semiconductor (T)—Yu. V. Gulyaev and V. V. Denisenko. 14(5), 1264–6 (Nov. 1972); CPM-7211A1516

Denker, B. I.—Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

—Recombination Luminescence in the Crystals $Y_3Al_5O_{12}$–TR_{II}, TR_{III} (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker and V. V. Osiko. 14(7), 1820–2 (Jan. 1973); CPM-7301C0780

Deryugin, I. A.—Nature of the Spin Echo in Ferrites (E)—I. A. Deryugin, Yu. A. Nechiporuk and A. V. Tychinskii. 14(1), 264–5 (C) (Jul. 1972); CPM-7207D1223

—Theory of the Propagation of Spin Waves in Ferrites in an Inhomogeneous Static Magnetic Field (T)—I. A. Deryugin and M. G. Lysenko. 14(5), 1117–21 (Nov. 1972); CPM-7211A1369

Didyk, R. I.—Formation of F Centers in Oxygen–Doped NaCl Crystals (E)—R. I. Didyk and N. A. Tsal'. 14(6), 1596–8(C) (Dec. 1972); CPM-7212D0932

Dikshtein, I. E.—Magnon Density of States in Canted Antiferromagnets with Substitutional Impurities (T)—I. E. Dikshtein and V. V. Tarasenko. 14(5), 1221–4 (Nov. 1972); CPM-7211A1473

Distler, G. I.—Transmission of Information through Au Boundary Layers (E)—G. I. Distler, V. G. Obronov and Yu. M. Gerasimov. 14(3), 580–3 (Sep. 1972); CPM-7209D0014

—Memory of Semiconductor Crystals and Photoepitaxy (E)—G. I. Distler and L. A. Shenyavskaya. 14(5), 1203–6 (Nov. 1972); CPM-7211A1455

Dmitrienko, I. M.—"Intrinsic" Steps on the Current–Voltage Characteristics of Josephson Point Contacts (E)—S. I. Bondarenko, I. M. Dmitrienko and T. P. Narbut. 14(2), 295–9 (Aug. 1972); CPM-7208E0452

Dmitrieva, L. V.—EPR of Mn^{2+} Ions in Lithium Metavanadate (E/T)—G. L. Bir, L. V. Dmitrieva and S. A. Kizhaev. 14(1), 18–21 (Jul. 1972); CPM-7207D0977

Dmitrieva, T. V.—Angular Spin Configurations in $MnCrFeO_4$ (E)—I. S. Lyubutin, T. V. Dmitrieva and L. M. Belyaev. 14(10), 2579–80 (Apr. 1973); CPM-7304E1225

Dmitruk, N. L.—Impurity Recombination Radiation Excited in GaAs by Strongly Absorbed Radiation (E/T)—G. P. Peka, N. L. Dmitruk and L. G. Shepel'. 14(11), 2866–9 (May 1973); CPM-7305D1094

Dobrovol'skii, V. N.—Inductance of Impact-Ionized Plasma in Indium Antimonide (E/T)—V. N. Dobrovol'skii and V. I. Uzhva. 14(12), 2985–7 (Jun. 1973); CPM-7306D0827

Dodokin, A. P.—Induced Magnetic Fields at Diamagnetic Atoms in an Antiferromagnet (E)—I. S. Lyubutin and A. P. Dodokin. 14(9), 2368–9(C) (Mar. 1973); CPM-7303E1192

Dolganov, V. K.—Interaction of Excitons with Phonons in Benzene Crystals (E)—V. L. Broude and V. K. Dolganov. 14(1), 225–7(C) (Jul. 1972); CPM-7207D1184

Dolgov, A. S.—Quantum States in Structures with Two Types of Point Defects (T)—A. S. Dolgov. 14(4), 842–4 (Oct. 1972); CPM-7210D0657

Doroshenko, N. K.—Influence of Space Charge on the Strength of Small-Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Doroshenko, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5 (C) (Feb. 1973); CPM-7302E1230

Dotsenko, V. L.—Behavior of Stress Relaxation During a Superconducting Transition (E)—V. I. Dotsenko, V. V. Pustovalov and V. S. Fomenko. 14(1), 161–4 (Jul. 1972); CPM-7207D1120

Dranova, Zh. I.—Formation of Large-Angle Grain Boundaries Under the Influence of Mechanical Stresses (E)—Zh. I. Dranova and I. M. Mikhailovskii. 14(12), 3104–5(C) (Jun. 1973); CPM-7306D0946

Drichko, I. L.—Effect of Microinhomogeneities on the Electron Absorption of Ultrasound in n-InSb (E/T)—I. L. Drichko and S. I. Kogan. 14(11), 2856–9 (May 1973); CPM-7305D1084

Drozdov, V. A.—Color Centers in a Heterojunction (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(6), 1531–2 (C) (Dec. 1972); CPM-7212D0867

—Electrically Stimulated Inversion of Photoconductivity in a Heterojunction Containing Color Centers (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(11), 2860–2 (May 1973); CPM-7305D1088

Drozhzhin, A. I.—Elastic Properties and Strength of Germanium Whiskers (E)—V. S. Postnikov, S. A. Ammer and A. I. Drozhzhin. 14(10), 2636–7(C) (Apr. 1973); CPM-7304E1282

Druinskii, E. L.—Operation of a Frank–Read Source in a Superconductor (T)—V. G. Bar'yakhtar, E. I. Druinskii and I. I. Fal'ko. 14(7), 1707–10 (Jan. 1973); CPM-7301C0667

Druzhinin, V. V.—Effect of a Magnetic Field on the Intensity of Exchange-Dipole Transitions (T/E)—V. V. Druzhinin and V. V. Teimurazyan. 14(6), 1381–4 (Dec. 1972); CPM-7212D0717

Dubinskii, A. A.—Determination of the Probability of $\Delta M_S=2$ Transitions in ESR Spectra by Microwave Saturation Method (E)—O. Ya. Grinberg, A. A. Dubinskii, B. V. Ozherel'ev, A. A. Chistota and Ya. S. Lebedev. 14(11), 2886–7(C) (May 1973); CPM-7305D1114

Dubinskii, V. E.—The "Shadow Effect" in the Bombardment of Single Crystals by Heavy Ions (E)—S. D. Panin, S. Ya. Lebedev and V. E. Dubinskii. 14(8), 2123–4(C) (Feb. 1973); CPM-7302E1249

Dubossarskaya, V. Ya.—Broadening of a Ferromagnetic Resonance Line by Chemical Magnetic Inhomogeneities (E)—A. A. Manuilova, V. E. Zuev, S. P. Stanishevskaya and V. Ya. Dubossarskaya. 14(9), 2365–6(C) (Mar. 1973); CPM-7303E1189

Dubrovskii, G. B.—Exciton Electroabsorption in 6H SiC (E)—G. B. Dubrovskii and V. I. Sankin. 14(4), 1024–6 (Oct. 1972); CPM-7210D0839

—Additional Lattice Absorption Bands in SiC Polytypes (E)—G. B. Dubrovskii and E. I. Radovanova. 14(8), 2127–8(C) (Feb. 1973); CPM-7302E1253

Duda, V. M.—Antiparallel Switching in a-Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(7), 1844–5(C) (Jan. 1973); CPM-7301C0804

—Features of Lateral Motion in a-Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(8), 2057–9 (Feb. 1973); CPM-7302E1183

Dudnik, E. F.—Antiparallel Switching in a-Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(7), 1844–5(C) (Jan. 1973); CPM-7301C0804

—Features of Lateral Motion in a-Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(8), 2057–9 (Feb. 1973); CPM-7302E1183

Duliu, O. G.—Temperature Variation of EPR Line Splitting of Cr^{3+} in $ZnWO_4$ by an External Electric Field (E/T)—A. A. Bugai, O. G. Duliu, V. M. Maksimenko and Yu. B. Shevchenko. 14(2), 475–6(C) (Aug. 1972); CPM-7208E0632

Dunaeva-Mitlina, T. A.—Ferrite Film as a Phase Diffraction Grating (E)—D. G. Berezin, T. A. Dunaeva-Mitlina and B. V. Khramov. 14(8), 2157–8(C) (Feb. 1973); CPM-7302E1283

Dundua, A. V.—Electroabsorption in CdTe (E/T)—R. M. Akopyan, Yu. N. Berozashvili, A. V. Dundua and D. Sh. Lordkipanidze. 14(3), 801–2(C) (Sep. 1972); CPM-7209D0235

Dunin, S. Z.—Zero-Sound Waves in Two-Component Fermi Liquids (T)—S. Z. Dunin and E. P. Fetisov. 14(1), 221–2(C) (Jul. 1972); CPM-7207D1180

—Superconductivity in a Fermi-Liquid Model of s-d Electrons (T)—S. Z. Dunin. 14(2), 559–60(C) (Aug. 1972); CPM-7208E0716

—Spin Waves in Two-Component Fermi Liquids (T)—S. Z. Dunin and E. P. Fetisov. 14(4), 881–4 (Oct. 1972); CPM-7210D0696

D'yachenko, N. G.—Relaxation Phenomena in Additively Colored KBr Crystals (E)—N. G. D'yachenko, A. V. Tyurin and A. S. Sheveleva. 14(10), 2648–9(C) (Apr. 1973); CPM-7304E1294

D'yakonov, A. M.—Investigation of the Acoustoelectric Instability in CdS by the Scattering of Light by Sound (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(1), 76–82 (Jul. 1972); CPM-7207D1035

—Acoustooptical Investigation of Sound Wave Interactions in Cadmium Sulfide (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(9), 2259–63 (Mar. 1973); CPM-7303E1083

D'yakonov, M. I.—Circular Polarization of Recombination Light of Semiconductors in a Weak Magnetic Field (T)—M. I. D'yakonov and V. I. Perel'. 14(5), 1245–50 (Nov. 1972); CPM-7211A1497

Dzhafarov, T. D.—Influence of the Decay of Si-Cu, Si-Ag, and Si-Au Solid Solutions on Defect Formation in Silicon (E)—T. D. Dzhafarov and T. T. Dedegkaev. 14(9), 2352–6 (Mar. 1973); CPM-7303E1176

Dzhioev, R. I.—Surface Influence on the Optical Orientation of Electron Spins in Semiconductors (E)—D. Z. Garbuzov, R. I. Dzhioev, L. M. Kanskaya and V. G. Fleisher. 14(6), 1481–7 (Dec. 1972); CPM-7212D0817

Dzyub, I. P.—Inelastic Scattering of Slow Neutrons by Localized Vibrations of Interstitial Atoms (T)—I. P. Dzyub and V. Z. Kochmarskii. 14(1), 1–8 (Jul. 1972); CPM-7207D0960

Dzyuba, A. S.—Kinetics of the Formation of the Isometric Form of Extraneous Inclusions in Crystals (T)—Ya. E. Geguzin, A. S. Dzyuba and V. V. Slezov. 14(2), 391–5 (Aug. 1972); CPM-7208E0548

E

Édel'man, I. S.—Magnetooptical Resonance in Manganese Ferrite in the Visible Spectral Region (E)—A. V. Malakhovskii, I. S. Édel'man and G. G. Vasil'ev. 14(3), 681–3 (Sep. 1972); CPM-7209D0115

—Permittivity Tensor of Manganese Ferrite in the Visible Range of Wavelengths (T/E)—A. V. Malakhovskii, I. S. Édel'man and O. A. Rybinskii. 14(6), 1462–6 (Dec. 1972); CPM-7212D0798

—Optical Properties of $FeBO_3$ in the Strong Absorption Region (E)—I. S. Édel'man, A. V. Malakhovskii, T. I. Vasil'eva and V. N. Seleznev. 14(9), 2442–4(C) (Mar. 1973); CPM-7303E1266
—Anomalous Change of Polar Kerr Effect in Nickel and Iron in a Strong Magnetic Field (E/T)—I. S. Edel'man, A. V. Malakhovskii, T. P. Morozova, A. T. Slivinskaya and G. S. Veinig. 14(11), 2770–2 (May 1973); CPM-7305D0998
Éfendiev, Sh. M.—Pleochroism in SbSI Associated with the Domain Structure (E)—A. Kh. Zeinally, A. M. Mamedov and Sh. M. Éfendiev. 14(8), 2106–7(C) (Feb. 1973); CPM-7302E1232
Efimov, O. N.—Anomalous Transmission of X Rays by Silicon Single Crystals Containing Dislocations (E)—É. G. Sheikhet, O. N. Efimov and N. V. Veselovskaya. 14(1), 223–4(C) (Jul. 1972); CPM-7207D1182
—Photoelectric Absorption and Diffuse Scattering in the Anomalous Transmission of X Rays in Ge Crystals (T)—É. G. Sheikhet and O. N. Efimov. 14(3), 625–7 (Sep. 1972); CPM-7209D0059
Efimov, V. M.—Spectrum of Nonisolated Donor–Acceptor Pairs in Hexagonal Silicon Carbide (E)—I. S. Gorban', V. A. Gubanov and V. M. Efimov. 14(8), 2010–4 (Feb. 1973); CPM-7302E1136
Efremov, N. A.—Bound-State Contribution to the Nonlinear Polarizability (T)—N. A. Efremov and E. P. Kaminskaya. 14(4), 1012–9 (Oct. 1972); CPM-7210D0827
—Second-Order Raman Scattering of Light by Optical Phonons under Fermi-Resonance Conditions with a Plasmon (T)—N. A. Efremov and E. P. Kaminskaya. 14(7), 1813–9 (Jan. 1973); CPM-7301C0773
Egorov, N. V.—Transient Effects Associated with Field Emission of Electrons from Silicon (E)—G. N. Fursei, N. V. Egorov and S. P. Manokhin. 14(6), 1453–6 (Dec. 1972); CPM-7212D0789
Elesin, V. F.—Effect of a Strong Electromagnetic Field on the Superconducting Properties of Semiconductors (T)—V. F. Elesin and Yu. V. Kopaev. 14(3), 570–4 (Sep. 1972); CPM-7209D0004
Eliseenko, L. G.—Dependence of Angular Distribution of Electrons Inelastically Scattered by Metals upon Their Energy (E/T)—L. V. Vorotneva and L. G. Eliseenko. 14(11), 2751–3 (May 1973); CPM-7305D0979
El'yashevich, A. M.—Influence of Dipole–Dipole Interaction on the Relaxation Properties of a Simple Model of a Dielectric (T)—P. N. Vorontsov–Vel'yaminov, A. M. El'yashevich and I. A. Favorskii. 14(3), 678–80 (Sep. 1972); CPM-7209D0112
—Effect of Microcracks on the Local Stress Distribution in Polymers and Their Deformation Properties. Network Model (T)—Yu. Ya. Gotlib, A. M. El'yashevich and Yu. E. Svetlov. 14(11), 2672–7 (May 1973); CPM-7305D0900
Emets, A. K.—Reduction in the Optical Strength of Transparent Solids Containing Macroscopic Defects (E)—Ya. E. Geguzin, A. K. Emets and Yu. I. Boiko. 14(5), 1350–1(C) (Nov. 1972); CPM-7211A1602
Epifanova, K. I.—High-Temperature Transport Properties of Gadolinium (E)—V. E. Zinov'ev, L. P. Gel'd, G. E. Chuprikov and K. I. Epifanova. 14(9), 2372–4(C) (Mar. 1973); CPM-7303E1196
Épshtein, É. M.—Indirect Exchange in Metals in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei and É. M. Épshtein. 14(1), 65–8 (Jul. 1972); CPM-7207D1024
—Coulomb Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei and É. M. Épshtein. 14(3), 632–5 (Sep. 1972); CPM-7209D0066
—Resonant Dynamic Breakdown of Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei, V. V. Pavlovich and É. M. Épshtein. 14(11), 2799–801 (May 1973); CPM-7305D1027
Eremenko, V. V.—Photoconductivity of Yttrium Ferrite Garnet (E)—V. V. Eremenko, A. P. Kirichenko, V. N. Rubtsov and V. S. Smirnov. 14(4), 1057–8 (Oct. 1972); CPM-7210D0872
—Raman Scattering of Light in Antiferromagnetic Siderite (E)—Yu. A. Popkov, V. V. Eremenko, V. I. Fomin and A. P. Mokhir. 14(8), 1985–9 (Feb. 1973); CPM-7302E1111
Eremin, M. V.—Theory of Exchange Interaction (T)—M. V. Eremin, A. A. Kornienko and A. M. Leushin. 14(2), 314–6 (Aug. 1972); CPM-7208E0471
—Direct Exchange Interaction Between Ions with Partly Filled 3d Shells (T)—R. L. Garifullina, M. V. Eremin and A. M. Leushin. 14(2), 317–24 (Aug. 1972); CPM-7208E0474
—Theory of the Crystal Field in Dielectrics (T)—M. V. Eremin and A. A. Kornienko. 14(3), 644–8 (Sep. 1972); CPM-7209D0078
—Exchange Interactions in Symmetrical Triads of Paramagnetic Ions (T)—V. A. Gaponenko, M. V. Eremin and Yu. V. Yablokov. 14 (11), 2884–5(C) (May 1973); CPM-7305D1112
Érikhman, N. S.—Relaxation of the Vibrational Energy in Methane Crystals (T)—A. A. Ovchinnikov and N. S. Érikhman. 14(10), 2451–7 (Apr. 1973); CPM-7304E1097
Ermakov, B. N.—Nuclear Magnetic Resonance in Ferroxplan Ferrites (E/T)—A. V. Kunevich, M. P. Petrov and B. N. Ermakov. 14(8), 2131–2(C) (Feb. 1973); CPM-7302E1257
Ermakov, G. A.—Flow-Stress Spectroscopy of NaCl Crystals Containing Color Centers (E)—G. A. Ermakov and É. M. Nadgornyi. 14(4), 1101–3(C) (Oct. 1972); CPM-7210D0916
—Temperature Dependence of Dislocation Mobility in Gamma Irradiated (10^7 rad Dose) NaCl Crystals (E/T)—G. A. Ermakov and É. M. Nadgornyi. 14(12), 2962–6 (Jun. 1973); CPM-7306D0804
Ermakov, S. V.—Surface "Pyroelectric" Effect in Insulating Films (T/E)—L. M. Blinov, S. V. Ermakov and L. M. Korolev. 14(12), 3073–4(C) (Jun. 1973); CPM-7306D0915
Ermilin, K. K.—Dispersion of Elastic Waves in Ferroelectrics (T/E)—K. K. Ermilin, V. A. Krasil'nikov and V. M. Prokhorov. 14(1), 251–2(C) (Jul. 1972); CPM-7207D1210
—Collinear Interaction of Elastic and Light Waves in a Lithium Niobate Single Crystal (E)—K. K. Ermilin and N. F. Reshetnikov. 14(7), 1871–3(C) (Jan. 1973); CPM-7301C0831
Ermolaev, A. M.—Influence of Isotopic Scattering on the Thermoelectric Power of Metals (T)—A. M. Ermolaev. 14(11), 2904(C) (May 1973); CPM-7305D1132
Erofeichev, V. G.—Coloration of PbF_2 Crystals by Irradiation and Their Electrical Properties (E)—V. A. Arkhangel'skaya, V. G. Erofeichev and M. N. Kiseleva. 14(12), 2953–5 (Jun. 1973); CPM-7306D0795
Erukhimov, M. Sh.—Spin-Wave Spectrum in Films Having a Band Periodic Domain Structure (T)—N. M. Salanskii and M. Sh. Erukhimov. 14(2), 511–3(C) (Aug. 1972); CPM-7208E0668
Esipov, V. S.—Effect of Domain Structure on the Behavior of Thermodynamic Parameters near a Critical Point (T)—V. S. Esipov, V. M. Zaprudskii and M. A. Mikulinskii. 14(1), 9–13 (Jul. 1972); CPM-7207D0968
Éstrin, É. I.—Pressure-Induced Transition in RbI at Low Temperatures (E)—V. N. Laukhin, A. G. Rabin'kin and É. I. Éstrin. 14(6), 1551–3(C) (Dec. 1972); CPM-7212D0887
Evdokimov, V. M.—Diffusion of Electrons in a Constant Electric Field with an Exponentially Varying Mobility and Lifetime (T)—V. M. Evdokimov and Yu. L. Lisovskii. 14(8), 2089–92 (Feb. 1973); CPM-7302E1215

F

Faek, M. K.—Mössbauer and Neutron-Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879
Fainshtein, A. L.—Possible Mechanism for the Two Stages of Exoelectron Emission During Oxidation of a Metal (E)—A. G. Gel'man and A. I. Fainshtein. 14(7), 1752–5 (Jan. 1973); CPM-7301C0712
Fairullov, F. S.—Energy Balance and Dynamics of Damage of Transparent Dielectrics by Laser Radiation (E)—Yu. V. Arkhipov, N. V. Morachevskii, V. V. Morozov and F. S. Fairullov. 14(6), 1510–3 (Dec. 1972); CPM-7212D0846
Fakidov, I. G.—Magnetic Properties of $Mn_{3-x}Ni_xB_2$ in Strong Magnetic Fields (E)—V. I. Timoshchuk and I. G. Fakidov. 14(6), 1424–7 (Dec. 1972); CPM-7212D0760
Fal'ko, I. L.—Operation of a Frank-Read Source in a Superconductor (T)—V. G. Bar'yakhtar, E. I. Druinskii and I. L. Fal'ko. 14(7), 1707–10 (Jan. 1973); CPM-7301C0667
Favorskii, I. A.—Phase Diagram of the Three-Dimensional Ising Model Involving the Interaction of First and Second Neighbors (T)—P. N. Vorontsov-Vel'yaminov, N. B. Gromova and I. A. Favorskii. 14(2), 490–2(C) (Aug. 1972); CPM-7208E0647
—Influence of Dipole–Dipole Interaction on the Relaxation Properties of a Simple Model of a Dielectric (T)—P. N. Vorontsov-Vel'yaminov, A. M. El'yashevich and I. A. Favorskii. 14(3), 678–80 (Sep. 1972); CPM-7209D0112
Fedchuk, A. P.—Influence of an Electric Field on the Parameters of Impurity Centers in Al_2O_3 (E)—V. V. Mikho, A. P. Fedchuk and L. M. Stambol'skaya. 14(10), 2665–6(C) (Apr. 1973); CPM-7304E1311

Fedii, A. A.—Spin–Lattice Relaxation of Co^{2+} Ions in $Na_2Zn(SO_4)_2.4H_2O$ and $Na_2Cd(SO_4)_2.2H_2O$ Single Crystals (E)—R. S. Tukhvatullin, A. A. Fedii and Yu. K. Chirkin. 14(11), 2896–7 (C) (May 1973); CPM-7305D1124

Fedorenko, A. I.—Elastic Stresses and Strains at the Interface of an Epitaxial β–Co—Cu Bicrystal (T/E)—B. G. Bord, L. S. Palatnik, A. I. Fedorenko and É. P. Fel'dman. 14(11), 2700–3 (May 1973); CPM-7305D0928

Fedorin, E. M.—Influence of Intense Laser Radiation on Instability Threshold of Spin Waves Excited by Parallel Pumping (E)—V. N. Agartanov, V. B. Antipov, V. V. Kolpakov and E. M. Fedorin. 14 (8), 2116–7(C) (Feb. 1973); CPM-7302E1242

Fedorov, D. L.—Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14(3), 732–7 (Sep. 1972); CPM-7209D0166

—Piezospectroscopic Investigation of Excited Exciton States in Cubic ZnS Single Crystals (E)—L. G. Suslina and D. L. Fedorov. 14(10), 2575–8 (Apr. 1973); CPM-7304E1221

—Effect of Uniaxial Deformation on the Absorption Spectrum of Bismuth Iodide Crystals (E)—E. F. Gross, D. L. Fedorov and R. I. Shekhmamet'ev. 14(11), 2767–9 (May 1973); CPM-7305D0995

Fedorov, M. I.—Impurity–Level Energies in Magnesium Phthalocyanine Films (E)—V. A. Benderskii, A. I. Belkind, M. I. Fedorov and S. B. Aleksandrov. 14(3), 674–7 (Sep. 1972); CPM-7209D0108

Fedorov, V. S.—Study of the Processes of Deactivation of the Metastable State of Excited Nd^{3+} Ions in LaF_3 Crystals (E)—Yu. K. Voron'ko, V. V. Osiko, N. V. Savost'yanova, V. S. Fedorov and I. A. Shcherbakov. 14(9), 2294–9 (Mar. 1973); CPM-7303E1118

Fedorov, Yu. N.—Dynamic Elasticity of Polyolefins (E/T)—Yu. A. Antsupov, V. P. Volodin, E. V. Kuvshinskii and Yu. N. Fedorov. 14(4), 952–4 (Oct. 1972); CPM-7210D0767

Fedorova, L. I.—Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744

Fedorovich, R. D.—Changes in the Work Function of Electrons Emitted from Centers in Gold Films Activated with Barium Oxide (E)—Yu. A. Kulyupin and R. D. Fedorovich. 14(10), 2663–4(C) (Apr. 1973); CPM-7304E1309

Fedorus, A. G.—Simultaneous Adsorption of Cesium and Barium onto Tungsten and Niobium Crystal Surfaces (E/T)—Yu. M. Konoplev, A. G. Naumovets and A. G. Fedorus. 14(2), 273–8 (Aug. 1972); CPM-7208E0430

Fedotov, Yu. V.—Electron–Nuclear Double Resonance of the Triplet State of M Centers in KCl (E/T)—Yu. V. Fedotov, N. N. Bagmut and I. V. Matyash. 14(2), 519–20(C) (Aug. 1972); CPM-7208E0676

Fel'dman, É. P.—Elastic Deformations Arising during Crystal Growth (T)—L. A. Pastur and É. P. Fel'dman. 14(9), 2322–4 (Mar. 1973); CPM-7303E1146

—Elastic Stresses and Strains at the Interface of an Epitaxial β–Co—Cu Bicrystal (T/E)—B. G. Bord, L. S. Palatnik, A. I. Fedorenko and É. P. Fel'dman. 14(11), 2700–3 (May 1973); CPM-7305D0928

Feoktistova, N. N.—New Ferroelectric : Antimony Orthoniobate (T) —A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14(2), 509–10(C) (Aug. 1972); CPM-7208E0666

Fetisov, E. P.—Zero–Sound Waves in Two–Component Fermi Liquids (T)—S. Z. Dunin and E. P. Fetisov. 14(1), 221–2(C) (Jul. 1972); CPM-7207D1180

—Spin Waves in Two–Component Fermi Liquids (T)—S. Z. Dunin and E. P. Fetisov. 14(4), 881–4 (Oct. 1972); CPM-7210D0696

Filippov, B. N.—Instability of the State of a Ferrodielectric Plate Against Buildup of Magnetoelastic Oscillations (T)—V. P. Lukomskii and B. N. Filippov. 14(10), 2585–7 (Apr. 1973); CPM-7304E1231

Filippov, N. I.—Relaxation of Mössbauer Spectra of $DyVO_4$ (E)—V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Filonich, V. S.—Optical Anisotropy and Cylindrical Domains in $(Gd,Tb,Eu)_3FeO_{12}$ Ferrite Garnets (E)—R. V. Pisarev, N. N. Kolpakova, Yu. M. Yakovlev, V. S. Filonich and A. G. Titova. 14 (2), 300–2 (Aug. 1972); CPM-7208E0457

Finkel', V. M.—Relationship between the Spectrum of Waves Emitted by a Growing Crack and the Energy Reserve at Its Tip (E)—I. S. Guz' and V. M. Finkel'. 14(7), 1619–22 (Jan. 1973); CPM-7301C0579

—Influence of Space Charge on the Strength of Small–Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Dorosheno, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5(C) (Feb. 1973); CPM-7302E1230

Firsov, Yu. A.—High–Temperature Hall Mobility in Cubic Polaron Semiconductors (T)—V. V. Bryksin and Yu. A. Firsov. 14(2), 384–6 (Aug. 1972); CPM-7208E0541

—Microscopic Theory of Surface Vibrations in Ionic Crystal Films (T) —V. V. Bryksin and Yu. A. Firsov. 14(4), 981–92 (Oct. 1972); CPM-7210D0796

Erratum: General Theory of Transport Phenomena in a Semiconductor with a Strong Electric Field [13, 2729 (1972)] (T)—V. V. Bryksin and Yu. A. Firsov. 14(6), 1615(C) (Dec. 1972); CPM-7212D0951

—Possibility of Electromagnetic Radiation During Phase Transitions (T)—V. N. Bogomolov, E. K. Kudinov and Yu. A. Firsov. 14(7), 1788–90 (Jan. 1973); CPM-7301C0748

—Mobility of Small Polarons in Strong Electric Fields (T)—V. V. Bryksin and Yu. A. Firsov. 14(12), 3019–27 (Jun. 1973); CPM-7306D0861

Fitting, Kh. I.—Energy Spectra of Electrons Transmitted by Thin Solid Films (E)—Kh. I. Fitting. 14(11), 2919–20(C) (May 1973); CPM-7305D1147

Fleisher, V. G.—Surface Influence on the Optical Orientation of Electron Spins in Semiconductors (E)—D. Z. Garbuzov, R. I. Dzhioev, L. M. Kanskaya and V. G. Fleisher. 14(6), 1481–7 (Dec. 1972); CPM-7212D0817

Flerov, I. A.—Thermal Capacity of the Ferroelectric $NaNH_4SeO_4.2H_2O$ (E/T)—K. S. Aleksandrov, V. G. Khlyustov, I. A. Flerov and N. V. Beznosikova. 14(11), 2853–5 (May 1973); CPM-7305D1081

Flerov, I. N.—Specific Heat of $KMnF_3$ (E)—V. G. Khlyustov, I. N. Flerov, A. T. Silin and A. N. Sal'nikov. 14(1), 139–41 (Jul. 1972); CPM-7207D1098

Flerova, S. A.—Light Emission from $BaTiO_3$ Crystals Subjected to Uniaxial Stress Pulses (E)—S. A. Flerova and Yu. I. Samchenko. 14(2), 498–9(C) (Aug. 1972); CPM-7208E0655

—Piezoelectric Properties of Polarized $BaTiO_3$ Ceramics Subjected to Uniaxial Transverse Compression (E)—E. V. Sinyakov, A. I. Gavrilishina and S. A. Flerova. 14(5), 1302–3(C) (Nov. 1972); CPM-7211A1554

—Emission of Light from $BaTiO_3$ Crystals During Phase Transitions (E)—S. A. Flerova and Yu. I. Samchenko. 14(9), 2406–7(C) (Mar. 1973); CPM-7303E1230

—Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133

Fogel', V. A.—Emission of Activated Hydrogen and Hydrogen Peroxide from Freshly Treated Surfaces of Solids (E)—V. V. Mitrofanov, S. A. Smirnov and V. A. Fogel'. 14(3), 781–2(C) (Sep. 1972); CPM-7209D0215

Fogel', Ya. M.—Changes in the Effect of Oxygen on the Thermionic–Emission Current of K^+ Ions (E)—L. P. Rekova, V. V. Mozgin, O. V. Kisel' and Ya. M. Fogel'. 14(8), 1961–5 (Feb. 1973); CPM-7302E1087

Fok, M. V.—Franz–Keldysh Effect in the Impurity Absorption Region (T/E)—Fan Ba Nyan, V. B. Stopachinskii and M. V. Fok. 14(12), 3000–3 (Jun. 1973); CPM-7306D0842

Fomenko, V. S.—Behavior of Stress Relaxation During a Superconducting Transition (E)—V. I. Dotsenko, V. V. Pustovalov and V. S. Fomenko. 14(1), 161–4 (Jul. 1972); CPM-7207D1120

Fomichev, V. A.—New X–Ray Emission Bands of Sn, Sc, Re, and Os in the Wavelength Range 90–900 Å (E)—A. S. Shulakov, V. A. Fomichev and T. M. Zimkina. 14(10), 2644–5(C) (Apr. 1973); CPM-7304E1290

Fomin, V. I.—Raman Scattering of Light in Antiferromagnetic Siderite (E)—Yu. A. Popkov, V. V. Eremenko, V. I. Fomin and A. P. Mokhir. 14(8), 1985–9 (Feb. 1973); CPM-7302E1111

Fridkin, V. M.—Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Frumkin, A. L.—Nonuniformity of Nanosecond Magnetization Reversal in Permalloy Films (E)—A. L. Frumkin. 14(6), 1373–6 (Dec. 1972); CPM-7212D0709

Furer, S. A.—Energy Spectra of W^+ and Mo^+ Ions Obtained in the Sputtering of Tungsten–Molybdenum Alloys (E)—A. A. Adylov, V. I. Veksler, A. M. Reznik and S. A. Furer. 14(2), 396–8 (Aug. 1972); CPM-7208E0553

Fursei, G. N.—Transient Effects Associated with Field Emission of Electrons from Silicon (E)—G. N. Fursei, N. V. Egorov and S. P. Manokhin. 14(6), 1453–6 (Dec. 1972); CPM-7212D0789

G

Gadomskii, O. N.—Concentration Dependences of the Intensities of Electric-Dipole Induction and Echo (T)—O. N. Gadomskii, V. R. Nagibarov and N. K. Solovarov. 14(9), 2428–9(C) (Mar. 1973); CPM-7303E1252

Gaiduchenya, V. F.—Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Gaisin, N. K.—Orientational Quadrupolar Relaxation in NMR Crystals (T)—Yu. L. Popov, N. K. Gaisin, F. I. Bashirov, K. S. Saikin and R. A. Dautov. 14(5), 1199–202 (Nov. 1972); CPM-7211A1451

Gaisin, V. A.—Absorption and Luminescence Spectra of Red Lead Monoxide (E)—V. A. Gaisin, L. Nanai and D. S. Nedzvetskii. 14 (9), 2378–9(C) (Mar. 1973); CPM-7303E1202

—Absorption and Luminescence Spectra of Diamond Crystals in the Red Region of the Spectrum (E/T)—D. S. Nedzvetskii and V. A. Gaisin. 14(10), 2535–8 (Apr. 1973); CPM-7304E1181

Gal'chinetskii, L. P.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Galkin, A. A.—Some Features of a Magnetic Transition in Chromium Telluride (E)—A. A. Galkin, Z. A. Zavadskii and B. Ya. Sinel'nikov. 14(1), 125–9 (Jul. 1972); CPM-7207D1084

—Fermi Surface of Cadmium under Pressure (E)—A. A. Galkin, E. P. Degtyar', S. E. Zhevago and A. I. Popovich. 14(3), 787–8(C) (Sep. 1972); CPM-7209D0221

—Magnetic Transformation in Manganese Arsenide Induced by a Strong Magnetic Field (E)—A. A. Galkin and É. A. Zavadskii. 14 (6), 1507–9 (Dec. 1972); CPM-7212D0843

Galkina, O. S.—Magnetoresistance of Gadolinium and Holmium in Strong Effective Fields (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14(3), 655–7 (Sep. 1972); CPM-7209D0089

—Hall Effect in Gadolinium in Fields up to 46 kOe at Liquid–Helium Temperatures (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14(9), 2224–6 (Mar. 1973); CPM-7303E1048

Gamurar', V. Ya.—Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–8 (Apr. 1973); CPM-7304E1196

Gamynin, E. V.—Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

Ganapol'skii, E. M.—Role of Hopping Conductivity in Absorption and Dispersion of Hypersound in CdS (E/T)—E. M. Ganapol'skii and V. V. Tarakanov. 14(2), 404–7 (Aug. 1972); CPM-7208E0561

Gann, V. V.—Effect of Singularities in the Density of Electron States on the Thermodynamics of a Normal Metal (T)—V. G. Bar'yakhtar, V. V. Gann and V. I. Makarov. 14(6), 1477–80 (Dec. 1972); CPM-7212D0813

Ganushchak, N. I.—Electrical Conductivity of Diphenylpolyene Films (E)—N. I. Ganushchak, N. I. Gritsenko and M. V. Kurik. 14(4), 1071–2(C) (Oct. 1972); CPM-7210D0886

Gaponenko, V. A.—Exchange Interactions in Symmetrical Triads of Paramagnetic Ions (T)—V. A. Gaponenko, M. V. Eremin and Yu. V. Yablokov. 14(11), 2884–5(C) (May 1973); CPM-7305D1112

Garber, R. I.—Some Features of the Damage of Calcite Crystals Caused by Laser Radiation (E)—R. I. Garber, E. I. Stepina and A. A. Stepanov. 14(1), 194–5(C) (Jul. 1972); CPM-7207D1153

—Thermally Activated Motion of Twinning Boundaries in Calcite (E)—R. I. Garber, V. M. Mikhailovskii and E. I. Stepina. 14(3), 773–4(C) (Sep. 1972); CPM-7209D0207

—Determination of the Starting Stresses of Dislocations from Etch Figure Rosettes (T)—R. I. Garber and V. M. Mikhailovskii. 14(5), 1342–3(C) (Nov. 1972); CPM-7211A1594

—Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744

Garbuzov, D. Z.—Surface Influence on the Optical Orientation of Electron Spins in Semiconductors (E)—D. Z. Garbuzov, R. I. Dzhioev, L. M. Kanskaya and V. G. Fleisher. 14(6), 1481–7 (Dec. 1972); CPM-7212D0817

Garifullin, I. A.—Observation of Electron Spin Resonance in a Type-II Superconductor (E)—T. S. Al'tshuler, I. A. Garifullin and É. G. Kharakhash'yan. 14(1), 213–4(C) (Jul. 1972); CPM-7207D1172

—Profile of the ESR Line of Localized Spins in Metals (T/E)—T. S. Al'tshuler, I. A. Garifullin, É. G. Kharakhash'yan and L. F. Shatrukov. 14(9), 2213–6 (Mar. 1973); CPM-7303E1037

Garifullina, R. L.—Direct Exchange Interaction Between Ions with Partly Filled 3d Shells (T)—R. L. Garifullina, M. V. Eremin and A. M. Leushin. 14(2), 317–24 (Aug. 1972); CPM-7208E0474

—Magnetic Properties of Tl^{2+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682

—Exchange-Coupled Pairs of Mn^{2+} Ions in NaCl (E)—R. L. Garifullina, M. M. Zaripov, V. G. Stepanov and Yu. N. Tolparov. 14(12), 2959–61 (Jun. 1973); CPM-7306D0801

Garshka, É. P.—Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, É. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

Gavrilishina, A. I.—Piezoelectric Properties of Polarized $BaTiO_3$ Ceramics Subjected to Uniaxial Transverse Compression (E)—E. V. Sinyakov, A. I. Gavrilishina and S. A. Flerova. 14(5), 1302–3 (C) (Nov. 1972); CPM-7211A1554

—Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133

Geguzin, Ya. E.—Kinetics of the Formation of the Isometric Form of Extraneous Inclusions in Crystals (T)—Ya. E. Geguzin, A. S. Dzyuba and V. V. Slezov. 14(2), 391–5 (Aug. 1972); CPM-7208E0548

—Reduction in the Optical Strength of Transparent Solids Containing Macroscopic Defects (E)—Ya. E. Geguzin, A. K. Emets and Yu. I. Boiko. 14(5), 1350–1(C) (Nov. 1972); CPM-7211A1602

—Light-Scattering Investigation of Precipitation of a Supersaturated Solution of Barium in a KCl Crystal (E)—Ya. E. Geguzin and V. G. Kononenko. 14(9), 2181–6 (Mar. 1973); CPM-7303E1005

Geilikman, M. B.—Dispersion of Dielectric Nonlinearity in Displacement Type Ferroelectrics (T)—B. Ya. Balagurov and M. B. Geilikman. 14(8), 2044–9 (Feb. 1973); CPM-7302E1170

Gel'd, L. P.—High-Temperature Transport Properties of Gadolinium (E)—V. E. Zinov'ev, L. P. Gel'd, G. E. Chuprikov and K. I. Epifanova. 14(9), 2372–4(C) (Mar. 1973); CPM-7303E1196

Gel'd, P. V.—Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

—Kinetic Properties and Electron Scattering Mechanisms of Ti, Zr, and Hf at High Temperatures (T/E)—V. E. Zinov'ev, S. I. Masharov, L. I. Chupina and P. V. Gel'd. 14(4), 902–5 (Oct. 1972); CPM-7210D0717

—Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

—Transport Properties of Scandium at High Temperatures (E)—V. E. Zinov'ev, L. I. Chupina and P. V. Gel'd. 14(9), 2416–8(C) (Mar. 1973); CPM-7303E1240

—Anisotropy of the Thermal Conductivity and Thermal Diffusivity in Iron Digermanide (E)—R. P. Krentsis, K. I. Meizer and P. V. Gel'd. 14(10), 2601–2 (Apr. 1973); CPM-7304E1247

Gel'man, A. G.—Possible Mechanism for the Two Stages of Exoelectron Emission During Oxidation of a Metal (E)—A. G. Gel'man and A. I. Fainshtein. 14(7), 1752–5 (Jan. 1973); CPM-7301C0712

Gel'mont, B. L.—Distribution Function and Energy Losses of Hot Electrons Interacting with Optical Phonons (T)—B. L. Gel'mont, R. I. Lyagushchenko and I. N. Yassievich. 14(2), 445–52 (Aug. 1972); CPM-7208E0602

Genkin, G. M.—Two-Photon Absorption in Superconductors (T)—V. M. Genkin and G. M. Genkin. 14(11), 2732–6 (May 1973); CPM-7305D0960

Genkin, V. M.—Two-Photon Absorption in Superconductors (T)—V. M. Genkin and G. M. Genkin. 14(11), 2732–6 (May 1973); CPM-7305D0960

Genkin, V. N.—Raman Scattering by Size–Quantization Levels (T)—V. N. Genkin and V. V. Sokolov. 14(4), 1080–2(C) (Oct. 1972); CPM-7210D0895

Gerasimenko, V. S.—Optical Phonons in Amorphous Films of Arsenic Chalcogenides (E)—V. P. Zakharov, V. S. Gerasimenko and L. P. Kucherenko. 14(8), 2138–9(C) (Feb. 1973); CPM-7302E1264

Gerasimov, Yu. M.—Transmission of Information through Au Boundary Layers (E)—G. I. Distler, V. G. Obronov and Yu. M. Gerasimov. 14(3), 580–3 (Sep. 1972); CPM-7209D0014

Gerbshtein, Yu. M.—Surface Optical Vibrations in Ionic Crystal Plates (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(2), 453–9 (Aug. 1972); CPM-7208E0610

—Mixed Plasmon–Phonon Surface Modes in n–InSb (E/T)—I. I. Reshina, Yu. M. Gerbshtein and D. N. Mirlin. 14(4), 1104–5(C) (Oct. 1972); CPM-7210D0919

—Surface Optical Vibrations in a Thin Film (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(11), 2849–52 (May 1973); CPM-7305D1077

Gergel', V. A.—Nonlinear Theory of Slow Recombination Waves (T)—V. A. Gergel', R. F. Kazarinov and R. A. Suris. 14(6), 1457–61 (Dec. 1972); CPM-7212D0793

Gershenzon, E. M.—Interband Transitions and Cyclotron Resonance of Light Holes in Strong Electric Fields (T)—E. M. Gershenzon, Yu. A. Gurvich, É. N. Gusinskii, R. I. Rabinovich and N. V. Soina. 14(6), 1493–500 (Dec. 1972); CPM-7212D0829

Geshko, E. I.—Temperature Dependence of the Components of the Thermal Expansion Tensor α_{ik} of Gallium (E)—E. I. Geshko, V. P. Mikhal'chenko and B. M. Sharlai. 14(6), 1554–5(C) (Dec. 1972); CPM-7212D0890

Gezalov, M. A.—Kinetics of the Formation of Submicroscopic Cracks in Polymers Under Load (E)—M. A. Gezalov, V. S. Kuksenko and A. I. Slutsker. 14(2), 344–8 (Aug. 1972); CPM-7208E0501

Gilinskii, I. A.—Absorption of Ultrasound in Semimetals (T)—I. A. Gilinskii and M. B. Sultanov. 14(7), 1653–9 (Jan. 1973); CPM-7301C0613

Gindin, I. A.—Effect of Ultrasonic Vibrations on a Crystal's Resistance to Plastic Deformation (E)—I. A. Gindin, I. M. Neklyudov, G. N. Malik and O. T. Rozumnyi. 14(5), 1126–30 (Nov. 1972); CPM-7211A1378

—Influence of Slip and Mechanical Twinning on the Density of Iron (E)—I. A. Gindin, V. M. Rozenberg, Ya. D. Starodubov and L. A. Chirkina. 14(6), 1414–6 (Dec. 1972); CPM-7212D0750

—Change in the Electrical Resistivity of Lead after Creep in the Normal and Superconducting States (E)—I. A. Gindin, V. P. Lebedev and Ya. D. Starodubov. 14(7), 1748–51 (Jan. 1973); CPM-7301C0708

—Decreased Dislocation Density in Crystals Due to the Effect of Ultrasonic Vibrations (E)—I. A. Gindin, O. I. Bolchok, G. N. Malik and I. M. Neklyudov. 14(7), 1828–9(C) (Jan. 1973); CPM-7301C0788

—Effect of Ultrasonic Irradiation on the Development of Twinning in Cadmium (E)—I. A. Gindin, O. I. Volchok and I. M. Neklyudov. 14(11), 2762–3 (May 1973); CPM-7305D0990

Gindin, L. G.—Electrical Conductivity of Some Amorphous and Crystalline Polymers in Strong Electric Fields (E)—A. A. Shilyaev and L. G. Gindin. 14(4), 1094–5(C) (Oct. 1972); CPM-7210D0909

Ginzburg, A. É.—Fluctuations and Scattering of Slow Neutrons and Electromagnetic Waves near the Critical Antiferromagnetic–Ferromagnetic Transition Point (T)—I. A. Akhiezer and A. É. Ginzburg. 14(1), 142–5 (Jul. 1972); CPM-7207D1101

—Interaction of Neutrons and Light with Magnetoacoustic Waves in Crystals Having a Ferromagnetic–Antiferromagnetic Transition (T)—A. É. Ginzburg, L. N. Davydov and Z. A. Spol'nik. 14(7), 1774–8 (Jan. 1973); CPM-7301C0734

Girshberg, Ya. G.—Temperature Dependence of Carrier Mobility in Barium Titanate (E/T)—É. V. Bursian, Ya. G. Girshberg and É. N. Starov. 14(4), 872–5 (Oct. 1972); CPM-7210D0687

Gitis, M. B.—Electromagnetic Excitation of Sound in Nickel (E)—M. B. Gitis. 14(12), 2992–5 (Jun. 1973); CPM-7306D0834

Gitsu, D. V.—Special Characteristics of the Thermo–EMF of Thin Bismuth Films (E)—V. I. Burchakova, D. V. Gitsu and M. I. Kozlovskii. 14(3), 775–6(C) (Sep. 1972); CPM-7209D0209

Glazhevskii, B. A.—Nonmetal–Metal Transition in $Eu_{1-x}Gd_xO$ (E)—A. A. Samokhvalov, B. A. Glazhevskii, M. I. Simonova and N. I. Solin. 14(1), 230–1(C) (Jul. 1972); CPM-7207D1189

Glauberman, A. E.—Color Centers in a Heterojunction (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(6), 1531–2 (C) (Dec. 1972); CPM-7212D0867

—Energy Losses of Fast Electrons Due to the Creation of Excitons in Magnetic Fields (T)—A. E. Glauberman and A. V. Pundyk. 14 (10), 2603–4 (Apr. 1973); CPM-7304E1249

—Electrically Stimulated Inversion of Photoconductivity in a Heterojunction Containing Color Centers (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(11), 2860–2 (May 1973); CPM-7305D1088

Glinchuk, M. D.—Ion–Lattice Interaction of Noncentral Ions in Cubic Crystals (T)—A. A. Karmazin, M. F. Deigen and M. D. Glinchuk. 14(1), 152–6 (Jul. 1972); CPM-7207D1111

—Scattering of Conduction Electrons by Tunneling States of Defects in Ionic Crystals (T/E)—M. F. Deigen, M. D. Glinchuk and L. A. Suslin. 14(8), 2096–9 (Feb. 1973); CPM-7302E1222

—Ion–Lattice Relaxation and Nuclear Spin–Lattice Relaxation of Li^+ in KCl (T)—A. A. Karmazin and M. D. Glinchuk. 14(8), 2144–5 (C) (Feb. 1973); CPM-7302E1270

—Structure of Potential Wells Responsible for a Nonequidistant Spectrum of Li^+ in KCl (T)—M. D. Glinchuk and A. A. Karmazin. 14(9), 2398–9(C) (Mar. 1973); CPM-7303E1222

Glinskii, G. F.—Linear Electrooptical Effect in Gallium Phosphide (E)—G. F. Glinskii, A. N. Pikhtin and D. A. Yas'kov. 14(2), 291–4 (Aug. 1972); CPM-7208E0448

Glushko, S. N.—Dynamics of Vibrations of Sn^{119} Nuclei in Dilute Tin–Base Alloys (E)—V. V. Chekin, A. I. Velikodnyi, S. N. Glushko and E. D. Semenova. 14(2), 479–80(C) (Aug. 1972); CPM-7208E0636

Glushkov, M. V.—Longitudinal Magnetoresistance of n–Si in Strong Magnetic Fields (E/T)—M. V. Glushkov and A. I. Markin. 14(12), 2967–70 (Jun. 1973); CPM-7306D0809

Godyaev, É. D.—Broadening, Profile, and Shift of Phononless Lines in the Spectra of Impure n–Paraffin Crystals Recorded in the 4.2–77°K Range (E)—E. I. Al'shits, É. D. Godyaev and R. I. Personov. 14(6), 1385–92 (Dec. 1972); CPM-7212D0721

Gogolin, O. V.—Influence of Uniaxial Compression on the Anisotropy of the Electroabsorption of Light in GaAs (E)—Yu. N. Berozashvili, O. V. Gogolin and D. Sh. Lordkipanidze. 14(11), 2926–7(C) (May 1973); CPM-7305D1154

Gokhman, V. L.—EPR Line Shape in the Presence of the Spin–Phonon and Static Portions of Dipole–Dipole Interactions (T)—B. E. Vugmeister, V. L. Gokhman and V. Ya. Zevin. 14(9), 2280–4 (Mar. 1973); CPM-7303E1104

Gol'danskii, V. I.—Influence of Illumination on the Lifetime of Positrons in Silver Halide Crystals (E)—I. I. Bardyshev, V. I. Gol'danskii and A. D. Mokrushin. 14(3), 803–4(C) (Sep. 1972); CPM-7209D0237

—Diffusion Processes in Irradiated Molecular Crystals (E/T)—A. I. Mikhailov, A. I. Bol'shakov, Ya. S. Lebedev and V. I. Gol'danskii. 14(4), 1000–6 (Oct. 1972); CPM-7210D0815

—Effect of a Glass–Crystal Phase Transition on the Spin–Lattice Relaxation Time (E)—I. G. Gusakovskaya, T. I. Larkina and V. I. Gol'danskii. 14(9), 2274–6 (Mar. 1973); CPM-7303E1098

Goletskaya, A. D.—Some Features of the Valence Band of Bi_2Te_3 (E)—V. V. Sologub, A. D. Goletskaya and R. V. Parfen'ev. 14(3), 783–4(C) (Sep. 1972); CPM-7209D0217

Golosov, N. S.—Effect of the Ratio of the Interaction Energies in the First and Second Coordination Spheres on Atomic Ordering in Face–Centered Cubic Solid Solutions (T/E)—N. S. Golosov, L. Ya. Pudan, G. S. Golosova and L. E. Popov. 14(5), 1280–7 (Nov. 1972); CPM-7211A1532

—Long– and Short–Range Order in Alloys with Cu_3Au Type Crystal Lattices (T)—N. S. Golosov, G. S. Golosova and L. E. Popov. 14 (10), 2493–6 (Apr. 1973); CPM-7304E1139

Golosova, G. S.—Effect of the Ratio of the Interaction Energies in the First and Second Coordination Spheres on Atomic Ordering in Face–Centered Cubic Solid Solutions (T/E)—N. S. Golosov, L. Ya. Pudan, G. S. Golosova and L. E. Popov. 14(5), 1280–7 (Nov. 1972); CPM-7211A1532

—Long– and Short–Range Order in Alloys with Cu_3Au Type Crystal Lattices (T)—N. S. Golosov, G. S. Golosova and L. E. Popov. 14 (10), 2493–6 (Apr. 1973); CPM-7304E1139

Golosovskii, I. V.—Magnetic Structure of the Garnet Andradite (E) —V. P. Plakhtii and I. V. Golosovskii. 14(9), 2387–9(C) (Mar. 1973); CPM-7303E1211

Golovashkin, A. I.—Thermoreflection in Polyvalent Metals in the Bragg Band–Band Transition Range (E)—A. I. Golovashkin, K. V. Mitsen and G. P. Motulevich. 14(6), 1467–72 (Dec. 1972); CPM-7212D0803

Golovkin, V. S.—Influence of an External Field Thermal Hysteresis of the Magnetic Structure of Chromium (E)—V. S. Golovkin, V. N. Bykov and V. A. Levdik. 14(6), 1533–4(C) (Dec. 1972); CPM-7212D0869

Golovnin, V. A.—Effective Magnetic Fields at the Diamagnetic Tin Atoms in $MnSn_2$ (E)—V. A. Golovnin, S. B. Zezin and R. N. Kuz'min. 14(5), 1313–5(C) (Nov. 1972); CPM-7211A1565

Golovshchikova, G. I.—Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14(10), 2539–42 (Apr. 1973); CPM-7304E1185

Gol'tsman, B. M.—Temperature Dependences of the Electron Effective Mass and Mobility in $Bi_2Te_{3-x}Se_x$ (E/T)—B. M. Gol'tsman, V. A. Kutasov and L. N. Luk'yanova. 14(4), 868–71 (Oct. 1972); CPM-7210D0683

Gol'tsov, Yu. I.—Positive Temperature Coefficient of Resistance in Doped Lead Titanate (E)—Yu. I. Gol'tsov, O. I. Prokopalo and L. A. Belova. 14(3), 805–6(C) (Sep. 1972); CPM-7209D0239

Golub, A. A.—Effect of Renormalized Plasma Spectrum on the Superconductivity in Semiconductors (T)—A. A. Golub and M. K. Kolpazhiu. 14(7), 1695–8 (Jan. 1973); CPM-7301C0655

Golubeva, N. G.—Spin–Spin Relaxation in Thin Ferromagnetic Films (T)—N. G. Golubeva and A. I. Kurguzov. 14(7), 1832–4(C) (Jan. 1973); CPM-7301C0792

Golubtsov, V. V.—Structure of the Absorption Bands of Quasimetallic Centers in Alkali Halide Crystals (E)—V. V. Golubtsov and B. N. Khlopkov. 14(1), 232–3(C) (Jul. 1972); CPM-7207D1191

Gomoyunova, M. V.—Anisotropy of the True Secondary Electron Emission (E)—M. V. Gomoyunova. 14(12), 2947–9 (Jun. 1973); CPM-7306D0789

Goncharov, K. V.—Nonlinear Effects in the Propagation of Finite-Amplitude Hypersonic Waves in Ferroelectric Crystals (T/E)—N. R. Valitova and K. V. Goncharov. 14(3), 768–70(C) (Sep. 1972); CPM-7209D0202

Gorbachev, V. V.—Positron Annihilation in Certain Transition Metal Hydrides (E)—V. I. Sabin, R. A. Andrievskii, V. V. Gorbachev and A. D. Tsyganov. 14(11), 2815–7 (May 1973); CPM-7305D1043

Gorban', I. S.—Impurity Absorption Spectra of Silicon Carbide in the Near Infrared Region (E)—I. S. Gorban', Yu. A. Marazuev and A. S. Skirda. 14(3), 664–7 (Sep. 1972); CPM-7209D0098

—Spectrum of Nonisolated Donor–Acceptor Pairs in Hexagonal Silicon Carbide (E)—I. S. Gorban', V. A. Gubanov and V. M. Efimov. 14(8), 2010–4 (Feb. 1973); CPM-7302E1136

—Photoionization Spectra of Impurity Centers in α SiC(6H) at High Temperatures (E)—I. S. Gorban', V. P. Zavada and A. S. Skirda. 14(10), 2652–3(C) (Apr. 1973); CPM-7304E1298

—Long-Wavelength Fundamental Absorption Edge of $CdSiP_2$ Crystals (E)—I. S. Gorban', V. V. Lugovskii and V. P. Radzivil. 14(12), 3089–90(C) (Jun. 1973); CPM-7306D0931

Gorbatov, G. Z.—Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634

—Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Gorbenko, P. K.—Structure and Conversion of Hole Centers in KCl(NaCl) Crystals (E)—P. K. Gorbenko and A. A. Kovtun. 14 (4), 1046–7(C) (Oct. 1972); CPM-7210D0861

Gorchak, L. V.—Thermal Conductivity of $GaAs_{1-x}P_x$ Solid Solutions (E)—L. V. Gorchak, V. V. Negreskul and A. G. Cheban. 14(9), 2382–4(C) (Mar. 1973); CPM-7303E1206

Gordeev, I. V.—Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Gordienko, V. A.—Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14(2), 530–2(C) (Aug. 1972); CPM-7208E0687

Gorenko, L. M.—Propagation of Electromagnetic Waves in Ferromagnetic Metals with p-Type Conductivity (T)—L. M. Gorenko and R. G. Khlebopros. 14(11), 2694–5 (May 1973); CPM-7305D0922

Gorobchenko, V. D.—Relaxation of Mössbauer Spectra of $DyVO_4$ (E) —V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Gorodetskii, A. E.—Mechanism of Oriented Crystallization of Gold on an Intermediate Layer of Amorphous Carbon (E)—V. I. Trofimov and A. E. Gorodetskii. 14(3), 760–2(C) (Sep. 1972); CPM-7209D0194

Gorodetskii, D. A.—Structure of Lead Films on a Tungsten (100) Surface (E)—D. A. Gorodetskii and A. A. Yas'ko. 14(3), 636–8 (Sep. 1972); CPM-7209D0070

Goryachikh, S. I.—Paramagnetic Resonance Absorption of Ultrasound by Conduction Electrons (T)—S. I. Goryachikh and B. M. Khabibullin. 14(4), 860–3 (Oct. 1972); CPM-7210D0675

Goryaga, A. N.—Anomalies in the Coercive Force in the Compensation Temperature Region in Ferrite-Spinels (E)—K. P. Belov, A. N. Goryaga and T. Ya. Gridasova. 14(5), 1225–7 (Nov. 1972); CPM-7211A1477

—Magnetic and Magnetostrictive Properties of the Ferrite $CuCr_2O_4$ (E)—K. P. Belov, A. N. Goryaga, L. G. Antoshina and Yu. F. Popov. 14(12), 3071–2(C) (Jun. 1973); CPM-7306D0913

Gotlib, Yu. Ya.—Effect of Microcracks on the Local Stress Distribution in Polymers and Their Deformation Properties. Network Model (T)—Yu. Ya. Gotlib, A. M. El'yashevich and Yu. E. Svetlov. 14(11), 2672–7 (May 1973); CPM-7305D0900

Govorkov, V. G.—"Deformation Memory" in Crystals (E/T)—V. G. Govorkov, G. V. Berezhkova, V. R. Regel' and E. P. Kozlovskaya. 14(2), 546(C) (Aug. 1972); CPM-7208E0703

Govorova, O. A.—Impurity Absorption of Infrared Radiation in n-Type SiC(6H) (E)—O. V. Vakulenko, O. A. Govorova and B. M. Shutov. 14(1), 242(C) (Jul. 1972); CPM-7207D1201

—Infrared Absorption in α SiC(6H) Activated by Ultraviolet Background Illumination (E)—O. V. Vakulenko and O. A. Govorova. 14(12), 2939–41 (Jun. 1973); CPM-7306D0781

Grabovskis, V. Ya.—Ionization of In^+ and Tl^+ Centers in KCl and KBr Crystals by Interstitial Halogen Atoms (E)—I. K. Vitol, V. Ya. Grabovskis, S. G. Zazubovich and Ch. B. Lushchik. 14(4), 894–8 (Oct. 1972); CPM-7210D0709

Grachev, B. D.—Channeling Effects in the Scattering of 50-keV Electrons in Thin Copper Crystals (E)—Yu. S. Korobochkо, E. L. Berezovskii, B. D. Grachev, S. S. Kozlovskii and V. I. Mineev. 14 (11), 2812–4 (May 1973); CPM-7305D1040

Grankin, V. L.—Three-Magnon Splitting in Ferrites (E)—G. A. Melkov and V. L. Grankin. 14(11), 2916(C) (May 1973); CPM-7305D1144

Grechushnikov, B. N.—Paramagnetic Ions of Gd^{3+} and Mn^{2+} in an ScF_3 Crystal (E)—L. S. Starostina, B. N. Grechushnikov and V. F. Koryagin. 14(12), 2936–8 (Jun. 1973); CPM-7306D0778

Grekov, A. A.—Photodomain Effect and Deformation in SbSI Single Crystals (E)—A. A. Grekov, R. E. Pasynkov and E. D. Rogach. 14(8), 1919–21 (Feb. 1973); CPM-7302E1045

—Electromechanical Hysteresis and Photodeformation Effect in SbSI Single Crystals (E)—A. A. Grekov, E. D. Rogach and L. N. Syrkin. 14(9), 2396–7(C) (Mar. 1973); CPM-7303E1220

—Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Greznev, Yu. S.—Influence of Temperature on the ESR Spectrum of Mn^{2+} in Cs_2SO_4 (E)—R. Yu. Abdulsabirov, Yu. S. Greznev, M. M. Zaripov and V. G. Stepanov. 14(6), 1569–70(C) (Dec. 1972); CPM-7212D0905

—Influence of a Phase Transition of the First Kind on the ESR Spectrum of Mn^{2+} in $(NH_4)_2SO_4$ (E)—R. Yu. Abdulsabirov, Yu. S. Greznev and M. M. Zaripov. 14(11), 2894–5(C) (May 1973); CPM-7305D1122

Gridasova, T. Ya.—Anomalies in the Coercive Force in the Compensation Temperature Region in Ferrite Spinels (E)—K. P. Belov, A. N. Goryaga and T. Ya. Gridasova. 14(5), 1225–7 (Nov. 1972); CPM-7211A1477

Grigas, I. P.—Acoustic Investigations of Sb_2S_3 Crystals (E)—I. P. Grigas, V. F. Kunigelis, A. S. Orlyukas and V. I. Samulionis. 14 (3), 796–7(C) (Sep. 1972); CPM-7209D0230

Grigor'ev, S. B.—Magnetoelastic Attenuation in Nickel at High Ultrasonic Frequencies (E/T)—S. B. Grigor'ev and L. K. Kudryashova. 14(7), 1726–8 (Jan. 1973); CPM-7301C0686

Grigor'ev, Yu. M.—Superconductivity of Films of Nitrides of Several Metals and Alloys Prepared by the Electrothermal Method (E)—Yu. M. Grigor'ev, V. F. Degtyareva, A. G. Merzhanov and A. G. Rabin'kin. 14(10), 2626–7(C) (Apr. 1973); CPM-7304E1272

Grinberg, O. Ya.—Determination of the Probability of $\Delta M_S=2$ Transitions in ESR Spectra by Microwave Saturation Method (E)—O. Ya. Grinberg, A. A. Dubinskii, B. V. Ozherel'ev, A. A. Chistota and Ya. S. Lebedev. 14(11), 2886–7(C) (May 1973); CPM-7305D1114

Grinchenko, Yu. A.—Effect of Dislocation Broadening on the Shape of a Nuclear Magnetic Resonance Line (E)—Yu. A. Grinchenko and B. L. Timan. 14(6), 1404–7 (Dec. 1972); CPM-7212D0740

Grishmanovskii, A. N.—Interaction of Transverse Elastic Waves with Spin Waves in the Uniaxial Ferromagnet $RbNiF_3$ (E/T)—A. N. Grishmanovskii, V. V. Lemanov, G. A. Smolenskii and P. P. Syrnikov. 14(8), 2050–2 (Feb. 1973); CPM-7302E1176

Gritsenko, N. I.—Electrical Conductivity of Diphenylpolyene Films (E)—N. I. Ganushchak, N. I. Gritsenko and M. V. Kurik. 14(4), 1071–2(C) (Oct. 1972); CPM-7210D0886

Gromova, N. B.—Phase Diagram of the Three–Dimensional Ising Model Involving the Interaction of First and Second Neighbors (T)—P. N. Vorontsov–Vel'yaminov, N. B. Gromova and I. A. Favorskii. 14(2), 490–2(C) (Aug. 1972); CPM-7208E0647

Groshik, I. I.—Influence of the Nonequilibrium Carrier Density on the Formation of Phase Boundaries in $SbSI_xBr_{1-x}$ Single Crystals (E)—I. I. Groshik, I. D. Turyanitsa and F. M. Migolinets. 14(10), 2614–5(C) (Apr. 1973); CPM-7304E1260

Gross, E. F.—Bound Exciton Luminescence in Germanium Crystals (E)—E. F. Gross, B. V. Novikov and N. S. Sokolov. 14(2), 368–71 (Aug. 1972); CPM-7208E0525

—Spectroscopic Observation of the Lifetime of Free Excitons (T/E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1193–8 (Nov. 1972); CPM-7211A1445

—Kinetics of Bound–Exciton Formation in CdS Crystals (E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14 (5), 1331–2(C) (Nov. 1972); CPM-7211A1583

—Fine Structure of the Bielectron or Bihole Energy Levels in BiI_3 Crystals (E)—E. F. Gross, N. V. Starostin, M. P. Shepilov and R. I. Shekhmamet'ev. 14(7), 1681–5 (Jan. 1973); CPM-7301C0641

—Zero–Phonon Radiative Annihilation of Indirect Excitons in Germanium Crystals with Isoelectronic Substitutional Impurities (T)—E. F. Gross, N. S. Sokolov and A. N. Titkov. 14(7), 1732–4 (Jan. 1973); CPM-7301C0692

—Effect of Uniaxial Deformation on the Absorption Spectrum of Bismuth Iodide Crystals (E)—E. F. Gross, D. L. Fedorov and R. I. Shekhmamet'ev. 14(11), 2767–9 (May 1973); CPM-7305D0995

Grunin, V. S.—Model of Irradiation–Produced ESR Centers in Aluminosilicates (T/E)—V. S. Grunin, V. A. Ioffe and I. S. Yanchevskaya. 14(7), 1839–41(C) (Jan. 1973); CPM-7301C0799

Gubankov, V. N.—Properties of Superconducting Point Contacts (E)—V. N. Gubankov, K. K. Likharev and N. M. Margolin. 14(4), 819–25 (Oct. 1972); CPM-7210D0634

—Resistance of Thin Superconducting Films in the Dynamic Mixed State (E)—V. N. Gubankov. 14(9), 2264–6 (Mar. 1973); CPM-7303E1088

—Nonlinear Microwave Properties of Narrow Superconducting Films (E)—V. N. Gubankov, K. K. Likharev and N. B. Pavlov. 14(11), 2721–5 (May 1973); CPM-7305D0949

Gubanov, A. I.—Temperature Dependence of the Elastic Constants for Crystals Having the Diamond Structure (T)—A. I. Gubanov and S. Yu. Davydov. 14(2), 372–6 (Aug. 1972); CPM-7208E0529

Erratum: Correction to the Papers "Temperature Dependence of the Elastic Constants for Crystals Having the Diamond Structure" and "Anharmonic Properties of Crystals Having the Zinc–Blende Lattice" [14, 372 (1972)] (T)—A. I. Gubanov and S. Yu. Davydov. 14(7), 1897(C) (Jan. 1973); CPM-7301C0857

—Anharmonic Properties of Crystals having the Zinc Blende Lattice (T)—A. I. Gubanov and S. Yu. Davydov. 14(4), 1020–3 (Oct. 1972); CPM-7210D0835

Gubanov, V. A.—Spectrum of Nonisolated Donor–Acceptor Pairs in Hexagonal Silicon Carbide (E)—I. S. Gorban', V. A. Gubanov and V. M. Efimov. 14(8), 2010–4 (Feb. 1973); CPM-7302E1136

Gufan, Yu. M.—Theory of Phase Transitions in Boracites (T)—Yu. M. Gufan and V. P. Sakhnenko. 14(7), 1660–5 (Jan. 1973); CPM-7301C0620

Gulyaev, Yu. V.—Acoustoelectronic Effects in Piezoelectric Semiconductors at Large Acoustic Intensities (E/T)—V. V. Proklov, Yu. V. Gulyaev and A. I. Morozov. 14(4), 832–8 (Oct. 1972); CPM-7210D0647

—Negative Photoconductivity in Semiconductors (T)—Yu. G. Bachinin and Yu. V. Gulyaev. 14(4), 1092–3(C) (Oct. 1972); CPM-7210D0907

—Nonlinear Effects in the Propagation of a High–Intensity Surface Acoustic Wave in a Semiconductor (T)—Yu. V. Gulyaev and V. V. Denisenko. 14(5), 1264–6 (Nov. 1972); CPM-7211A1516

—New Type of Acoustic Surface Waves in Conducting Crystals (T)—Yu. V. Gulyaev. 14(5), 1318–9(C) (Nov. 1972); CPM-7211A1570

Gurevich, A. G.—Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14 (11), 2835–7 (May 1973); CPM-7305D1063

Gurevich, L. É.—Influence of a Constant Electric Field on Cyclotron Waves (T)—L. É. Gurevich and A. Ya. Shik. 14(1), 58–61 (Jul. 1972); CPM-7207D1017

—Magnetic Nonlinearity of the Dependence of Current on Electric Field Caused by the Intrinsic Field (T/E)—L. E. Gurevich and O. A. Mezrin. 14(11), 2704–5 (May 1973); CPM-7305D0932

Gurevich, V. L.—Nondegenerate Semiconductors with High Conduction–Electron Concentrations (T)—V. L. Gurevich. 14(3), 584–8 (Sep. 1972); CPM-7209D0018

—"Optical Cooling" of Conduction Electrons in Conductors (T)—A. G. Aronov and V. L. Gurevich. 14(4), 966–70 (Oct. 1972); CPM-7210D0781

—Effect of Tunnel Extraction of Excitations from a Superconductor on the Superconducting Phase Transition (T)—A. G. Aronov and V. L. Gurevich. 14(9), 2309–11 (Mar. 1973); CPM-7303E1133

Gurevich, Z. N.—Spontaneous Change in the Radius of Curvature of Plastically Deformed Silicon Slices (E)—P. V. Pavlov, V. I. Pashkov, G. I. Uspenskaya and Z. N. Gurevich. 14(2), 537–8(C) (Aug. 1972); CPM-7208E0694

Guro, G. M.—Dependence of the Piezoeffect in Barium Titanate on the Means of Screening the Spontaneous Induction (T)—B. M. Vul, G. M. Guro and I. I. Ivanchik. 14(3), 602–7 (Sep. 1972); CPM-7209D0036

Gurskii, Z. A.—Theory of Pseudopotentials and Vegard's Rule in Alloys of Alkali Metals (T)—G. L. Krasko and Z. A. Gurskii. 14 (2), 269–72 (Aug. 1972); CPM-7208E0426

Gurvich, Yu. A.—Interband Transitions and Cyclotron Resonance of Light Holes in Strong Electric Fields (T)—E. M. Gershenzon, Yu. A. Gurvich, É. N. Gusinskii, R. I. Rabinovich and N. V. Soina. 14 (6), 1493–500 (Dec. 1972); CPM-7212D0829

Gusakovskaya, I. G.—Effect of a Glass–Crystal Phase Transition on the Spin–Lattice Relaxation Time (E)—I. G. Gusakovskaya, T. I. Larkina and V. I. Gol'danskii. 14(9), 2274–6 (Mar. 1973); CPM-7303E1098

Gusinskii, É. N.—Interband Transitions and Cyclotron Resonance of Light Holes in Strong Electric Fields (T)—E. M. Gershenzon, Yu. A. Gurvich, É. N. Gusinskii, R. I. Rabinovich and N. V. Soina. 14 (6), 1493–500 (Dec. 1972); CPM-7212D0829

Guz', I. S.—Interaction of Stress Waves with a Boundary in an LiF Bicrystal (E)—I. S. Guz' and G. S. Demina. 14(4), 1087–8(C) (Oct. 1972); CPM-7210D0902

—Relationship between the Spectrum of Waves Emitted by a Growing Crack and the Energy Reserve at Its Tip (E)—I. S. Guz' and V. M. Finkel'. 14(7), 1619–22 (Jan. 1973); CPM-7301C0579

Gvozdover, R. S.—Electrical Conduction Mechanism in the Ferroelectric Semiconductor SbSI (E)—E. S. Artobolevskaya, E. V. Chenskii, R. S. Gvozdover and V. I. Petrov. 14(8), 1935–9 (Feb. 1973); CPM-7302E1061

I

Ievlev, I. Yu.—Acoustic Emission in a Thermoelastic Martensite Reaction (E)—R. I. Mints, V. P. Melekhin, I. Yu. Ievlev and V. V. Bukhalenkov. 14(5), 1368–9(C) (Nov. 1972); CPM-7211A1620

—Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Ievlev, V. M.—Structure of Small-Angle Torsion Boundaries in the (001) Plane (E)—V. S. Postnikov, K. S. Solov'ev, V. M. Ievlev, I. V. Zolotukhin and Yu. K. Netusov. 14(5), 1311–2(C) (Nov. 1972); CPM-7211A1563

Ikonnikov, V. P.—Crystal Electric Fields in Cadmium–Cobalt and Cadmium–Nickel Ferrites–Spinels (E/T)—O. A. Bayukov, V. P. Ikonnikov, G. N. Il'inova and G. P. Popov. 14(8), 2040–3 (Feb. 1973); CPM-7302E1166

Il'in, M. A.—Absorption Bands of SiC–4H in the Far Infrared (E)—M. A. Il'in and E. P. Rashevskaya. 14(8), 2148–9(C) (Feb. 1973); CPM-7302E1274

Il'ina, M. A.—Superconductivity of Bismuth Phases Produced at Pressures Up to 30 kbar (E)—M. A. Il'ina and E. S. Itskevich. 14 (2), 328–31 (Aug. 1972); CPM-7208E0485

—Effect of Pressure on the Superconductivity of Niobium Diselenide (E)—M. A. Il'ina, E. S. Itskevich and G. A. Kalyuzhnaya. 14(2), 428–30 (Aug. 1972); CPM-7208E0585

Il'inova, G. N.—Crystal Electric Fields in Cadmium–Cobalt and Cadmium–Nickel Ferrites–Spinels (E/T)—O. A. Bayukov, V. P. Ikonnikov, G. N. Il'inova and G. P. Popov. 14(8), 2040–3 (Feb. 1973); CPM-7302E1166

Il'inskii, A. V.—Exciton Spectrum of Photoconductivity in Zinc Sulfide Crystals (E)—A. V. Il'inskii, B. V. Novikov, L. G. Suslina and E. B. Shadrin. 14(7), 1673–7 (Jan. 1973); CPM-7301C0633

Ilisavskii, Yu. V.—Investigation of the Acoustoelectric Instability in CdS by the Scattering of Light by Sound (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(1), 76–82 (Jul. 1972); CPM-7207D1035

—Sound Amplification in n–InSb (E)—Yu. V. Ilisavskii and D. Chiplis. 14(2), 336–9 (Aug. 1972); CPM-7208E0493

—Lattice Absorption of Sound in InSb at 77°K (E/T)—Yu. V. Ilisavskii and D. Chiplis. 14(8), 2085–8 (Feb. 1973); CPM-7302E1211

—Acoustooptical Investigation of Sound Wave Interactions in Cadmium Sulfide (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(9), 2259–63 (Mar. 1973); CPM-7303E1083

Il'mas, É. R.—Photoconductivity of Al_2O_3 in the Region near the Intrinsic Absorption Edge (E)—É. R. Il'mas and A. I. Kuznetsov. 14(5), 1255–8 (Nov. 1972); CPM-7211A1507

Imshennik, V. K.—Study of Iron Atom Vibrations in Vivianite and Pyrite Crystals Using Mössbauer Spectroscopy (E)—I. P. Suzdalev, I. A. Vinogradov and V. K. Imshennik. 14(5), 1136–42 (Nov. 1972); CPM-7211A1388

Indan, L. A.—Influence of Zero Energy on the Plastic Deformation of Hydrogen (E)—Yu. E. Stetsenko, D. N. Bol'shutkin, L. A. Indan and A. A. Khudoteplaya. 14(1), 149–51 (Jul. 1972); CPM-7207D1108

Ioffe, I. V.—New Mechanism of Current-Stimulated Emission of Electromagnetic Waves from Crystals (T/E)—I. V. Ioffe. 14(6), 1421–3 (Dec. 1972); CPM-7212D0757

—Theory of Optomagnetic Waves in Semiconductors and Semimetals (T)—I. V. Ioffe and L. F. Mezrina. 14(6), 1527–8(C) (Dec. 1972); CPM-7212D0863

—Nonlinear Theory for The Excitation of Short-Wavelength Surface Galvanomagnetic Waves (T)—I. V. Ioffe and Sh. A. Kuliev. 14(7), 1823(C) (Jan. 1973); CPM-7301C0783

—Optical Excitation of Plane-Polarized Waves and Structures (T)—I. V. Ioffe and L. F. Mezrina. 14(10), 2619(C) (Apr. 1973); CPM-7304E1265

Ioffe, V. A.—Model of Irradiation-Produced ESR Centers in Aluminosilicates (T/E)—V. S. Grunin, V. A. Ioffe and I. S. Yanchevskaya. 14(7), 1839–41(C) (Jan. 1973); CPM-7301C0799

Ionov, N. I.—Cooperative Adsorption of Hydrogen and Deuterium on the (111) Faces of Germanium and Silicon (E)—Yu. I. Belyakov, N. I. Ionov and T. N. Kompaniets. 14(10), 2567–70 (Apr. 1973); CPM-7304E1213

—Determination of the Kinetic Characteristics of the Desorption of Lanthanum and Neodymium Atoms and Ions from the (001) Face of Tungsten by the Temperature Modulation Method (E/T)—N. I. Ionov, Ts. S. Marinova and B. V. Yakshinskii. 14(11), 2717–20 (May 1973); CPM-7305D0945

Ionov, V. V.—Anisotropy in the Secondary Emission Properties of Single Crystals when Scanned by an Electron Beam (E)—V. V. Korablev and V. V. Ionov. 14(3), 692–5 (Sep. 1972); CPM-7209D0126

Isupov, V. A.—Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14 (10), 2539–42 (Apr. 1973); CPM-7304E1185

Itskevich, E. S.—Superconductivity of Bismuth Phases Produced at Pressures Up to 30 kbar (E)—M. A. Il'ina and E. S. Itskevich. 14 (2), 328–31 (Aug. 1972); CPM-7208E0485

—Effect of Pressure on the Superconductivity of Niobium Diselenide (E)—M. A. Il'ina, E. S. Itskevich and G. A. Kalyuzhnaya. 14(2), 428–30 (Aug. 1972); CPM-7208E0585

Ivakhno, V. N.—Quantum Efficiency of the Internal Photoelectric Effects and Impact Ionization in Germanium (E)—V. N. Ivakhno and I. I. Novak. 14(1), 157–60 (Jul. 1972); CPM-7207D1116

—Quantum Yield of the Internal Photoelectric Effect and Impact Ionization in PbS (E/T)—V. N. Ivakhno. 14(2), 481–2(C) (Aug. 1972); CPM-7208E0638

Ivancheako, Yu. M.—Conducting State of Metals with Nonmagnetic Impurities (T)—L. A. Zil'berman and Yu. M. Ivanchenko. 14(5), 1164–8 (Nov. 1972); CPM-7211A1416

Ivanchik, I. I.—Dependence of the Piezoeffect in Barium Titanate on the Means of Screening the Spontaneous Induction (T)—B. M. Vul, G. M. Guro and I. I. Ivanchik. 14(3), 602–7 (Sep. 1972); CPM-7209D0036

Ivanenko, Z. I.—Spin–Phonon Interaction in Doped Fluorite-Type Crystals (T)—Z. I. Ivanenko and B. Z. Malkin. 14(1), 122–4 (Jul. 1972); CPM-7207D1081

Ivanov, A. S.—Interference of Hyperfine Components in the Scattering of γ Radiation by Mössbauer Nuclei (T)—A. S. Ivanov and A. V. Kolpakov. 14(6), 1537–8(C) (Dec. 1972); CPM-7212D0873

Ivanov, A. V.—Electron Excitations Resulting from Photoionization of an LiF Crystal (E)—A. V. Ivanov. 14(6), 1601–2(C) (Dec. 1972); CPM-7212D0937

Ivanov, B. A.—Radiation from Magnets during First-Order Phase Transformations (T)—B. A. Ivanov and A. G. Kvirikadze. 14(3), 592–5 (Sep. 1972); CPM-7209D0026

—Parametric Excitation of Hypersound in Antiferromagnets (T)—B. A. Ivanov and A. G. Kvirikadze. 14(8), 1976–8 (Feb. 1973); CPM-7302E1102

—Instability of Uniform Oscillations of the Magnetic Moment of a Ferromagnet (T)—V. G. Bar'yakhtar, B. A. Ivanov and A. G. Kvirikadze. 14(9), 2385–6(C) (Mar. 1973); CPM-7303E1209

Ivanov, B. D.—Spin-Wave Resonance in Thin Single-Crystal Films of Manganese Ferrite (E)—B. D. Ivanov, B. A. Kalinikos, O. A. Rybinskii and D. N. Chartorizhskii. 14(2), 561–2(C) (Aug. 1972); CPM-7208E0718

Ivanov, G. A.—Effect of Sn and Te Impurity on the Magnetic Susceptibility of $Bi_{88}Sb_{12}$ Alloy (E)—V. I. Korishev, G. A. Ivanov and V. L. Naletov. 14(2), 500–1(C) (Aug. 1972); CPM-7208E0657

—Influence of Additions of Ag, In, and Pt on the Transport Effects in Bismuth—Antimony Alloys (E)—G. A. Ivanov, Yu. N. Saraev and V. I. Korishev. 14(2), 539–40(C) (Aug. 1972); CPM-7208E0696

—Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14 (4), 971–4 (Oct. 1972); CPM-7210D0786

Ivanov, I. V.—Anomalous Behavior of the Dielectric Nonlinearity Coefficient in Strontium Titanate near the Phase Transition at 110°K (E)—I. M. Buzin, I. V. Ivanov, E. I. Rukin and V. F. Chuprakov. 14(7), 1770–3 (Jan. 1973); CPM-7301C0730

Ivanov, M. A.—Properties of a Magnetic Impurity Atom Located between Magnetic Sublattices in Antiferromagnets (T)—M. A. Ivanov. 14(2), 467–74 (Aug. 1972); CPM-7208E0624

Ivanov, S. A.—Mosaic Structure of Germanium in Longevity and Creep Testing (E)—A. N. Bakhtibaev, V. I. Betekhtin, S. A. Ivanov, M. M. Myshlyaev and I. I. Khodos. 14(1), 117–21 (Jul. 1972); CPM-7207D1076

Ivanov, V. G.—Breakdown in p-Type Ge Field Emitters (E)—V. G. Ivanov and T. P. Smirnova. 14(10), 2624–5(C) (Apr. 1973); CPM-7304E1270

Ivanov, V. V.—Relationship between Illumination-Induced Multiple Domains in SbSI Crystals and Elements of the Hysteresis Loop (E)—V. M. Rudyak, A. A. Bogomolov and V. V. Ivanov. 14(9), 2390–2(C) (Mar. 1973); CPM-7303E1214

—Relationship between the Barkhausen Effect and the State of Defects in Ferroelectric Semiconductor SbSI (E)—V. M. Rudyak, A. A. Bogomolov, V. V. Ivanov and A. I. Yanter. 14(10), 2646–7 (C) (Apr. 1973); CPM-7304E1292

Ivanov, V. Yu.—Effect of Pressure on Galvanomagnetic Phenomena in Rare Earth Metals (E)—L. I. Vinokurova, E. I. Kondorskii, Kh. Rakhimova and V. Yu. Ivanov. 14(3), 613–9 (Sep. 1972); CPM-7209D0047

—Influence of Pressure on the Hall Effect in Dysprosium Single Crystals (E)—L. I. Vinokurova, E. I. Kondorskii, V. Yu. Ivanov, V. M. Murav'eva and Kh. Rakhimova. 14(12), 2981–4 (Jun. 1973); CPM-7306D0823

Ivanova, A. V.—Positronium Atom in Ionic Crystals with NaCl–Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14(3), 608–12 (Sep. 1972); CPM-7209D0042

Ivchenko, E. L.—Two–Photon Absorption and Optical Orientation of Free Carriers in Cubic Crystals (T)—E. L. Ivchenko. 14(12), 2942–6 (Jun. 1973); CPM-7306D0784

Ivleva, L. I.—Second–Harmonic Generation in Lithium Niobate (E/T)—L. I. Ivleva, Yu. S. Kuz'minov and L. S. Shumskaya. 14 (11), 2686–9 (May 1973); CPM-7305D0914

Iygi, Kh. R.-V.—Electron–Microscope Detection and Optical Investigation of Exciton Decay Products in KBr Crystals (E/T)—Kh. R.-V. Iygi, Ch. B. Lushchik, A. F. Malysheva and E. S. Tiisler. 14(1), 95–100 (Jul. 1972); CPM-7207D1054

Izvozchikov, V. A.—Pyroelectric Processes in Lead Monoxide (E)—V. A. Bordovskii and V. A. Izvozchikov. 14(5), 1344–5(C) (Nov. 1972); CPM-7211A1596

K

Kabalkina, S. S.—Retaining the Metastable High–Pressure Phases of CdS, Mg_2Sn, SnTe, and SnTe–GeTe Alloys (E)—Z. V. Malyushitskaya, S. S. Kabalkina and L. F. Vereshchagin. 14(4), 1040–5 (Oct. 1972); CPM-7210D0855

Kachalov, N. P.—Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

Kachlishvili, Z. S.—Faraday Effect in Semiconductors in Strong Electric Fields (T)—Z. S. Kachlishvili. 14(5), 1309–10(C) (Nov. 1972); CPM-7211A1561

Kadomtseva, A. M.—Magnetic and Magnetoelastic Properties of $FeBO_3$ Single Crystals (E)—A. M. Kadomtseva, R. Z. Levitin, Yu. F. Popov, V. N. Seleznev and V. V. Uskov. 14(1), 172–4 (Jul. 1972); CPM-7207D1131

—Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Ledneva, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158

—Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

—Distinguishing Features of Magnetic Properties of Single–Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1558

—Magnetostriction of Polycrystalline Holmium and Dysprosium Orthoferrites (E/T)—V. A. Borodin, A. M. Kadomtseva, N. M. Kovtun and V. A. Khokhlov. 14(8), 1950–2 (Feb. 1973); CPM-7302E1076

Kaganov, M. I.—Selective Transparency of Ferromagnetic Metal Plates near Antiresonance (T)—M. I. Kaganov and A. S. Mikhailov. 14(11), 2748–50 (May 1973); CPM-7305D0976

Kaipov, D. K.—Mössbauer Effect in Impurity Atoms of Fe^{57} in Quartz Single Crystals (E)—M. F. Vereshchak, A. K. Zhetbaev, D. K. Kaipov and K. K. Satpaev. 14(10), 2638–9(C) (Apr. 1973); CPM-7304E1284

Kaisheva, L. I.—Surface Ionization of Alkali–Metal Atoms on a Silicon Carbide Single Crystal (E)—L. I. Kaisheva. 14(8), 2108–9 (C) (Feb. 1973); CPM-7302E1234

Kalashnikov, N. P.—Origin of Oriented Maxima in the Bremsstrahlung Spectra of Nonrelativistic Electrons in a Single Crystal (T)—N. P. Kalashnikov, É. A. Koptelov and M. I. Ryazanov. 14(4), 1033–4 (Oct. 1972); CPM-7210D0848

Kalashnikov, V. P.—Effect of Elastic Scattering on the Resonant Increase in the Kinetic Temperature under ESR Saturation Conditions (T)—V. P. Kalashnikov and Kh. M. Bikkin. 14(6), 1567–8(C) (Dec. 1972); CPM-7212D0903

Kalenkov, S. G.—Domain Structure of Orthoferrites near the Spin Reorientation Temperature and Its Effect on the Phase Transition (E/T)—A. K. Zvezdin and S. G. Kalenkov. 14(10), 2458–61 (Apr. 1973); CPM-7304E1104

Kalinikos, B. A.—Spin–Wave Resonance in Thin Single–Crystal Films of Manganese Ferrite (E)—B. D. Ivanov, B. A. Kalinikos, O. A. Rybinskii and D. N. Chartorizhskii. 14(2), 561–2(C) (Aug. 1972); CPM-7208E0718

Kalinina, N. A.—Effect of Form of Inelastic Deformation on Intermolecular Reaction in Polymers (E/T)—V. A. Bershtein, N. A. Kalinina, S. V. Savin and V. A. Stepanov. 14(4), 975–7 (Oct. 1972); CPM-7210D0790

Kalinovich, D. F.—State of Nickel Atoms in a Nickel–Chromium Alloy (E)—D. F. Kalinovich, I. I. Kovenskii and M. D. Smolin. 14 (12), 3098–9(C) (Jun. 1973); CPM-7306D0940

Kalishevich, G. I.—Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

Kalugin, M. M.—Formation and Annealing of Defects in Germanium During Bombardment with Krypton Ions (E)—I. A. Abroyan, M. M. Kalugin and O. A. Podsvirov. 14(1), 203–4(C) (Jul. 1972); CPM-7207D1162

Kalyamin, A. V.—Investigation of the α–Al_2O_3–Fe_2O_3 System by the Mössbauer Effect (E)—A. V. Kalyamin, B. G. Lur'e, L. A. Marshak and A. N. Murin. 14(12), 3083–4(C) (Jun. 1973); CPM-7306D0925

Kalyuzhnaya, G. A.—Effect of Pressure on the Superconductivity of Niobium Diselenide (E)—M. A. Il'ina, E. S. Itskevich and G. A. Kalyuzhnaya. 14(2), 428–30 (Aug. 1972); CPM-7208E0585

Kaminskaya, E. P.—Bound–State Contribution to the Nonlinear Polarizability (T)—N. A. Efremov and E. P. Kaminskaya. 14(4), 1012–9 (Oct. 1972); CPM-7210D0827

—Second–Order Raman Scattering of Light by Optical Phonons under Fermi–Resonance Conditions with a Plasmon (T)—N. A. Efremov and E. P. Kaminskaya. 14(7), 1813–9 (Jan. 1973); CPM-7301C0773

Kaminskaya, L. N.—Influence of Space Charge on the Strength of Small–Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Doroshenko, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5 (C) (Feb. 1973); CPM-7302E1230

Kaminskii, A. A.—Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–8 (Apr. 1973); CPM-7304E1196

Kampi, Yu. Ya.—Photoemission Studies of Oxyhalide Crystals of Bismuth (E)—V. M. Bentsa, M. V. Shtilikha, D. V. Chepur, Yu. Yu. Kampi and V. V. Matyashevskii. 14(3), 671–3 (Sep. 1972); CPM-7209D0105

Kamzin, A. S.—Mössbauer Determination of Orientation of Spins in the Tetrahedral Sublattice of $Bi_2Fe_4O_9$ (E/T)—V. A. Bokov, A. S. Kamzin and G. Ya. Karapet'yan. 14(8), 2168–70(C) (Feb. 1973); CPM-7302E1294

Kamzina, L. S.—Anomalous Behavior of the Optical Absorption Coefficient of Lead Magnoniobate Single Crystals in the Region of a Broad Ferroelectric Transition (E)—L. S. Kamzina, N. N. Krainik and N. N. Nesterova. 14(7), 1853–5(C) (Jan. 1973); CPM-7301C0813

Kanskaya, L. M.—Surface Influence on the Optical Orientation of Electron Spins in Semiconductors (E)—D. Z. Garbuzov, R. I. Dzhioev, L. M. Kanskaya and V. G. Fleisher. 14(6), 1481–7 (Dec. 1972); CPM-7212D0817

Kaplan, B. I.—Bound Electron–Phonon States in a Magnetic Field (T)—B. I. Kaplan and I. B. Levinson. 14(5), 1212–20 (Nov. 1972); CPM-7211A1464

—Absorption of Light by Bound States of an Electron and a Phonon in Magnetic Fields (T)—B. I. Kaplan and I. B. Levinson. 14(6), 1434–40 (Dec. 1972); CPM-7212D0770

Kaplin, V. V.—Electron Scattering by Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14 (7), 1864–5(C) (Jan. 1973); CPM-7301C0824

—Orientation Effects of β-Particle Scattering in Large-Thickness Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14(11), 2808–11 (May 1973); CPM-7305D1036

Karapet'yan, G. Ya.—Mössbauer Determination of Orientation of Spins in the Tetrahedral Subiattice of $Bi_2Fe_4O_9$ (E/T)—V. A. Bokov, A. S. Kamzin and G. Ya. Karapet'yan. 14(8), 2168–70(C) (Feb. 1973); CPM-7302E1294

Karasev, V. E.—Temperature Broadening and Shift of Phononless Lines in Luminescence Spectra of Crystals of Uranyl Compounds (E/T)—R. N. Shchelokov, Yu. I. Krasilov and V. E. Karasev. 14 (7), 1885–6(C) (Jan. 1973); CPM-7301C0845

Karataev, V. V.—Effect of the Type and Concentration of Structural Point Defects on the Electrophysical Properties of Undoped Gallium Arsenide (E/T)—E. V. Solov'eva, V. V. Karataev, M. G. Mil'vidskii, V. B. Osvenskii and O. G. Stolyarov. 14(2), 441–4 (Aug. 1972); CPM-7208E0598

Karmazin, A. A.—Ion–Lattice Interaction of Noncentral Ions in Cubic Crystals (T)—A. A. Karmazin, M. F. Deigen and M. D. Glinchuk. 14(1), 152–6 (Jul. 1972); CPM-7207D1111

—Ion–Lattice Relaxation and Nuclear Spin–Lattice Relaxation of Li^+ in KCl (T)—A. A. Karmazin and M. D. Glinchuk. 14(8), 2144–5 (C) (Feb. 1973); CPM-7302E1270

—Structure of Potential Wells Responsible for a Nonequidistant Spectrum of Li^+ in KCl (T)—M. D. Glinchuk and A. A. Karmazin. 14(9), 2398–9(C) (Mar. 1973); CPM-7303E1222

Karmazin, V. V.—Faraday Effect in the Region of the Intrinsic Absorption Edge in CdSe (E)—V. V. Mussil, V. V. Karmazin and V. K. Miloslavskii. 14(12), 3004–7 (Jun. 1973); CPM-7306D0846

Karnachev, A. S.—NMR Study of Spin Reorientation in the Weak Ferromagnet $ErFeO_3$ (E/T)—N. M. Kovtun, A. S. Karnachev, E. E. Solov'ev, A. Ya. Chervonenkis and A. A. Shemyakov. 14(7), 1856–8(C) (Jan. 1973); CPM-7301C0816

Karov, D. D.—Theoretical Analysis of Polarization and of Nonlinear Optical Properties of Single Crystals (T)—D. D. Karov and S. N. Koikov. 14(12), 3064–7 (Jun. 1973); CPM-7306D0906

Karyakina, N. F.—Intrinsic Absorption and Thermal Properties of Stibiotantalite (E/T)—V. K. Novik, N. F. Karyakina and V. A. Timoshenkov. 14(5), 1288–90 (Nov. 1972); CPM-7211A1540

Kashcheev, V. N.—Phonon Polarization Operator in the Ising Model (T)—V. N. Kashcheev. 14(4), 942–51 (Oct. 1972); CPM-7210D0757

Kashchenevskii, L. Ya.—Fluctuations of Hot Photoelectrons in Semiconductors (T)—L. Ya. Kashchenevskii and I. M. Yakover. 14 (8), 1953–5 (Feb. 1973); CPM-7302E1079

Kashchenko, E. P.—Influence of the Amplitude of Free Vibrations on the Permittivity of $BaTiO_3$ Single Crystals (E)—E. P. Kashchenko and A. Yu. Kudzin. 14(4), 1085–6(C) (Oct. 1972); CPM-7210D0900

—Influence of Domain Structure on the Internal Friction of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and E. P. Kashchenko. 14(8), 2171–2(C) (Feb. 1973); CPM-7302E1297

Kasman, Ya. A.—Magnetization of $Y_3Fe_5O_{12}$ near the Curie Point (E) —A. I. Okorokov and Ya. A. Kasman. 14(10), 2622–3(C) (Apr. 1973); CPM-7304E1268

Kat, Do Chan—Instability of Two–Band Model of Metals with Respect to Annihilation Scattering (T)—Do Chan Kat and Yu. V. Kopaev. 14(9), 2252–8 (Mar. 1973); CPM-7303E1076

—Spectrum of Plasma Oscillations in Semimetals (T)—Do Chan Kat and Yu. V. Kopaev. 14(12), 3012–4 (Jun. 1973); CPM-7306D0854

Kats, M. L.—Mechanisms for the Laser Destruction of Alkali Halide Crystals and for the Multiphoton Ionization of Impurity Centers (E/T)—G. I. Aseev and M. L. Kats. 14(5), 1122–5 (Nov. 1972); CPM-7211A1374

—Many–Photon Excitation and Ionization of Tl^+ Impurity Centers in Alkali Halide Crystals (T/E)—G. I. Aseev and M. L. Kats. 14(5), 1173–6 (Nov. 1972); CPM-7211A1425

Kavalyauskas, Yu. F.—Form of the Electroreflection Spectrum in InP (E)—Yu. F. Kavalyauskas and A. Yu. Shileika. 14(4), 915–9 (Oct. 1972); CPM-7210D0730

Kazakov, A. A.—Calculation of the High–Temperature Dependence of Single–Ion Anisotropy Constants (T)—A. A. Kazakov and V. A. Rozhkina. 14(7), 1666–8 (Jan. 1973); CPM-7301C0626

Kazanin, M. M.—Poole–Frenkel Effect in β Rhombohedral Boron (E)—A. A. Berezin, V. K. Zaitsev, M. M. Kazanin and E. N. Tkalenko. 14(9), 2445–6(C) (Mar. 1973); CPM-7303E1269

Kazanskii, S. A.—Electron Structure of Ion–Hole Complexes Attached to Ni Ions in ZnS Crystals (E)—S. A. Kazanskii and A. I. Ryskin. 14(6), 1571–2(C) (Dec. 1972); CPM-7212D0907

Kazarinov, R. F.—Feasibility of Suppression of Gunn Domains (T)—S. N. Artemenko, R. F. Kazarinov and R. A. Suris. 14(6), 1393–9 (Dec. 1972); CPM-7212D0729

—Nonlinear Theory of Slow Recombination Waves (T)—V. A. Gergel', R. F. Kazarinov and R. A. Suris. 14(6), 1457–61 (Dec. 1972); CPM-7212D0793

Kenigsberg, N. L.—Inclined Texture Axis in Zinc Oxide Films for Ultrasonic Transducers (E)—N. L. Kenigsberg and A. N. Chernets. 14(9), 2227–9 (Mar. 1973); CPM-7303E1051

Kerimov, I. G.—Anisotropic Linear Expansion and the Isothermal Compressibility of a GaSe Single Crystal (E)—N. G. Aliev, I. G. Kerimov, M. M. Kurbanov and T. A. Mamedov. 14(5), 1304–5(C) (Nov. 1972); CPM-7211A1556

—Thermal Expansion and Isothermal Compressibility of Indium Chalcogenide Single Crystals (E)—N. G. Aliev, I. G. Kerimov and M. M. Kurbanov. 14(12), 3106–7(C) (Jun. 1973); CPM-7306D0948

Kessel', A. R.—Theory of Saturation of Nuclear Quadrupole Resonance (T)—I. L. Bukhbinder and A. R. Kessel'. 14(11), 2726–31 (May 1973); CPM-7305D0954

Khabibullin, B. M.—Paramagnetic Resonance Absorption of Ultrasound by Conduction Electrons (T)—S. I. Goryachikh and B. M. Khabibullin. 14(4), 860–3 (Oct. 1972); CPM-7210D0675

—Indirect Exchange Interaction of Optically Active Impurities Caused by Plasma Oscillations (T)—B. M. Khabibullin. 14(6), 1448–52 (Dec. 1972); CPM-7212D0784

Khachaturyan, A. G.—Theory of Ordering in Multicomponent Solid Solutions (T)—D. A. Badalyan and A. G. Khachaturyan. 14(9), 2270–3 (Mar. 1973); CPM-7303E1094

Khaimovich, E. P.—Effect of Spin–Lattice Relaxation and Ultrasound on the Perturbed γ–γ Angular Correlation in Paramagnets (E)—G. A. Denisenko and E. P. Khaimovich. 14(1), 106–10 (Jul. 1972); CPM-7207D1065

Khandros, V. O.—Sublimation of Cobalt in the Temperature Range Including the Curie Point (1320–1410°K) (E)—V. O. Khandros and N. A. Bogolyubov. 14(6), 1592–3(C) (Dec. 1972); CPM-7212D0928

Khannanov, Sh. Kh.—Intersecting Pile–Ups of Edge Dislocations (T) —R. G. Altynbaev and Sh. Kh. Khannanov. 14(9), 2439(C) (Mar. 1973); CPM-7303E1263

Kharakhash'yan, É. G.—Observation of Electron Spin Resonance in a Type–II Superconductor (E)—T. S. Al'tshuler, I. A. Garifullin and É. G. Kharakhash'yan. 14(1), 213–4(C) (Jul. 1972); CPM-7207D1172

—Profile of the ESR Line of Localized Spins in Metals (T/E)—T. S. Al'tshuler, I. A. Garifullin, É. G. Kharakhash'yan and L. F. Shatrukov. 14(9), 2213–6 (Mar. 1973); CPM-7303E1037

Kharkyanen, V. N.—Lifting of Degeneracy of the $^4E_{1g}$ Level of Mn^{2+} Ions in Cubic Antiferromagnetic Insulators in a Static Magnetic Field (T)—É. G. Petrov and V. N. Kharkyanen. 14(6), 1560–1(C) (Dec. 1972); CPM-7212D0896

Khashkhozhev, Z. M.—Self–Focusing of the Radiation of an Argon Laser in $Bi_{12}GeO_{20}$ by Means of Raman Scattering (E)—B. Kh. Bairamov, B. P. Zakharchenya and Z. M. Khashkhozhev. 14(5), 1181–8 (Nov. 1972); CPM-7211A1433

—Scattering of Light by Optical Phonons in $Bi_{12}SiO_{20}$ Crystals (E)— B. Kh. Bairamov, I. S. Rez, Z. M. Khashkhozhev and V. I. Tsanev. 14(6), 1473–6 (Dec. 1972); CPM-7212D0809

—Self–Focusing of Argon–Laser Radiation in $Bi_{12}SiO_{20}$ Crystals (E)— B. Kh. Bairamov, B. P. Zakharchenya and Z. M. Khashkhozhev. 14(9), 2357–62 (Mar. 1973); CPM-7303E1181

Kheifets, M. L.—Current Instability in a Polymer (E)—M. I. Kheifets. 14(8), 2159–60(C) (Feb. 1973); CPM-7302E1285

Khil'ko, G. L.—Spectrum of Co^{2+} Ion in ZnS–Co and Al Crystals Grown from the Melt (E)—A. I. Ryskin, L. A. Sysoev and G. I. Khil'ko. 14(3), 779–80(C) (Sep. 1972); CPM-7209D0213

Khimich, T. A.—Effect of Number of Fe^{3+} Exchange Linkages on Local Magnetic Fields at Fe^{57} Nuclei in the System $YFe_{1-x}Al_xO_3$ (E/T)—V. F. Belov, T. A. Khimich, M. N. Shipko and M. I. Dakhis. 14(2), 437–40 (Aug. 1972); CPM-7208E0594

Khimich, Yu. P.—Nuclear–Gamma–Resonance Study of the Magnetic Anisotropy of Yttrium Iron Garnet (E/T)—G. N. Belozerskii, Yu. P. Khimich and Yu. M. Yakovlev. 14(4), 993–6 (Oct. 1972); CPM-7210D0808

Khlebopros, R. G.—Effect of Boundary Conditions on the Distribution of Spins near the Surface of a Ferromagnet (T/E)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1791–3 (Jan. 1973); CPM-7301C0751
—Spin–Wave Resonance Spectrum in a Thin Ferromagnetic Layer with Mixed Boundary Conditions (T)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1826–7(C) (Jan. 1973); CPM-7301C0786
—Propagation of Electromagnetic Waves in Ferromagnetic Metals with p-Type Conductivity (T)—L. M. Gorenko and R. G. Khlebopros. 14(11), 2694–5 (May 1973); CPM-7305D0922
Khlopin, V. P.—Profile of the Optical Absorption and Luminescence Bands in Systems Exhibiting the Renner Effect (T)—V. P. Khlopin, B. S. Tsukerblat, Yu. B. Rozenfel'd and I. B. Bersuker. 14(4), 908–14 (Oct. 1972); CPM-7210D0723
Khlopkov, B. N.—Structure of the Absorption Bands of Quasimetallic Centers in Alkali Halide Crystals (E)—V. V. Golubtsov and B. N. Khlopkov. 14(1), 232–3(C) (Jul. 1972); CPM-7207D1191
Khlyustov, V. G.—Specific Heat of $KMnF_3$ (E)—V. G. Khlyustov, I. N. Flerov, A. T. Silin and A. N. Sal'nikov. 14(1), 139–41 (Jul. 1972); CPM-7207D1098
—Heat of the Semiconductor–Metal Phase Transition in V_2O_3 (E)—V. G. Khlyustov, A. S. Borukhovich and V. A. Perelyaev. 14(7), 1848–9(C) (Jan. 1973); CPM-7301C0808
—Thermal Capacity of the Ferroelectric $NaNH_4SeO_4.2H_2O$ (E/T)—K. S. Aleksandrov, V. G. Khlyustov, I. A. Flerov and N. V. Beznosikova. 14(11), 2853–5 (May 1973); CPM-7305D1081
Khodakov, G. S.—Investigation of the Diffusion of Impurities in Mercury Telluride (E)—F. A. Zaitov, V. I. Stafeev and G. S. Khodakov. 14(10), 2628–9(C) (Apr. 1973); CPM-7304E1274
Khodakovskaya, R. Ya.—ESR of Cr^{3+} in the Spinel $MgCr_2O_4$ Formed in the Glassy Matrix $2MgO.5SiO_2.2Al_2O_3.nCr_2O_3$ after Crystallization (E/T)—É. I. Abdrashitova and R. Ya. Khodakovskaya. 14(4), 1055–6(C) (Oct. 1972); CPM-7210D0870
Khodos, I. I.—Mosaic Structure of Germanium in Longevity and Creep Testing (E)—A. N. Bakhtibaev, V. I. Betekhtin, S. A. Ivanov, M. M. Myshlyaev and I. I. Khodos. 14(1), 117–21 (Jul. 1972); CPM-7207D1076
Khodosov, E. F.—Character of Electron–Nuclear Interactions in Metal–Hydrogen Systems Based on Transition Metals of Group IVb (E/T)—E. F. Khodosov and N. A. Shepilov. 14(3), 807–8(C) (Sep. 1972); CPM-7209D0241
Khokhlov, V. A.—Magnetostriction of Polycrystalline Holmium and Dysprosium Orthoferrites (E/T)—V. A. Borodin, A. M. Kadomtseva, N. M. Kovtun and V. A. Khokhlov. 14(8), 1950–2 (Feb. 1973); CPM-7302E1076
Khokhlov, V. I.—Localized States of Spin Systems with Two–Dimensional Defects (T)—V. I. Khokhlov. 14(6), 1577–8(C) (Dec. 1972); CPM-7212D0913
Kholodnyi, L. P.—Mobility of Individual Dislocations in Gallium Arsenide (E)—V. B. Osvenskii and L. P. Kholodnyi. 14(11), 2822–5 (May 1973); CPM-7305D1050
Khomskii, D. I.—Effect of a Narrow Partly Filled Band on Superconductivity in Transition and Rare–Earth Metals (T)—A. N. Kocharyan and D. I. Khomskii. 14(8), 2093–5 (Feb. 1973); CPM-7302E1219
—Thermodynamics of the Hubbard Model in the Strong–Interaction Region (T)—L. N. Bulaevskii and D. I. Khomskii. 14(12), 3015–8 (Jun. 1973); CPM-7306D0857
Khramov, B. V.—Ferrite Film as a Phase Diffraction Grating (E)—D. G. Berezin, T. A. Dunaeva–Mitlina and B. V. Khramov. 14(8), 2157–8(C) (Feb. 1973); CPM-7302E1283
Khrebtov, V. L.—Coalescence in Two–Phase Alloys (T/E)—E. P. Nechiporenko, V. V. Slezov, V. V. Sagalovich, N. E. Sagalovich and V. L. Khrebtov. 14(5), 1259–63 (Nov. 1972); CPM-7211A1511
Khronopulo, K. A.—Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583
Khudoteplaya, A. A.—Influence of Zero Energy on the Plastic Deformation of Hydrogen (E)—Yu. E. Stetsenko, D. N. Bol'shutkin, L. A. Indan and A. A. Khudoteplaya. 14(1), 149–51 (Jul. 1972); CPM-7207D1108
Khusidman, M. B.—Some Features of Hexagonal Boron Nitride (E)—M. B. Khusidman. 14(11), 2791–3 (May 1973); CPM-7305D1019
Khusnutdinova, V. Ya.—Thermal Conductivity of the Me_2X_4 Chalcogenides of Rare Earth Elements (E/T)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(3), 720–4 (Sep. 1972); CPM-7209D0154
—Thermal Conductivity of Sm_3S_4 (E)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(9), 2412–3(C) (Mar. 1973); CPM-7303E1236
Kidyarov, B. L.—Temperature Dependence of the Absorption of Ultrasound in $LiIO_3$ Crystals (E)—A. A. Abramovich, V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov and P. L. Mitnitskii. 14(9), 2237–42 (Mar. 1973); CPM-7303E1061
Kikineshi, A. A.—Domain Structure and Local States in SbSI Type Semiconductor—Ferroelectrics (T)—D. M. Bercha, A. A. Kikineshi, D. G. Semak and D. V. Chepur. 14(5), 1359–60(C) (Nov. 1972); CPM-7211A1611
Kikoin, K. A.—Collective Spin Excitations in Narrow Bands (T)—K. A. Kikoin. 14(5), 1143–8 (Nov. 1972); CPM-7211A1395
Kikvidze, R. R.—Excitation of Longitudinal Electromagnetic Waves by an Electron Beam in the Plasma of a Solid (T)—R. R. Kikvidze, V. G. Kotetishvili and A. A. Rukhadze. 14(1), 146–8 (Jul. 1972); CPM-7207D1105
—Emission Intensity from a Solid–State Plasma with Development of the Bunch Instability (T)—R. R. Kikvidze, V. G. Kotetishvili and A. A. Rukhadze. 14(8), 1931–4 (Feb. 1973); CPM-7302E1057
Kirichenko, A. P.—Photoconductivity of Yttrium Ferrite Garnet (E)—V. V. Eremenko, A. P. Kirichenko, V. N. Rubtsov and V. S. Smirnov. 14(4), 1057–8 (Oct. 1972); CPM-7210D0872
Kirichenko, N. A.—Stark Effect and Charge–Transfer States in Organic Semiconductors (E)—L. M. Blinov and N. A. Kirichenko. 14(8), 2163–4(C) (Feb. 1973); CPM-7302E1289
Kirii, V. B.—Summation of Electron Excitations in Fluorite–Type Crystals Activated by Er^{3+} Ions (T)—V. B. Kirii and V. L. Shekhtman. 14(10), 2559–63 (Apr. 1973); CPM-7304E1205
Kirillova, M. M.—Optical Absorption in Tungsten at T=77°K (E)—L. V. Nomerovannaya, M. M. Kirillova and M. M. Noskov. 14(2), 541–2(C) (Aug. 1972); CPM-7208E0698
Kiryukhin, N. N.—Instability of Domains in Nonlinear Ferromagnetic Resonance (E)—N. N. Kiryukhin, B. M. Mikhailov, Ya. A. Monosov and P. I. Nabokin. 14(6), 1573–4(C) (Dec. 1972); CPM-7212D0909
—Raman–Nath Scattering of Light by Magnetostatic Waves (E)—N. N. Kiryukhin, I. N. Kotel'nikov and F. V. Lisovskii. 14(12), 3087–8(C) (Jun. 1973); CPM-7306D0929
Kisel', O. V.—Changes in the Effect of Oxygen on the Thermionic–Emission Current of K^+ Ions (E)—L. P. Rekova, V. V. Mozgin, O. V. Kisel' and Ya. M. Fogel'. 14(8), 1961–5 (Feb. 1973); CPM-7302E1087
Kiselev, V. A.—Coulomb Excitons in Semiconductors and Screening of Exchange Interaction (T)—V. A. Kiselev and A. G. Zhilich. 14(5), 1233–5 (Nov. 1972); CPM-7211A1485
Kiseleva, M. N.—Coloration of PbF_2 Crystals by Irradiation and Their Electrical Properties (E)—V. A. Arkhangel'skaya, V. G. Erofeichev and M. N. Kiseleva. 14(12), 2953–5 (Jun. 1973); CPM-7306D0795
Kiseleva, S. S.—Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585
Kizhaev, S. A.—EPR of Mn^{2+} Ions in Lithium Metavanadate (E/T)—G. L. Bir, L. V. Dmitrieva and S. A. Kizhaev. 14(1), 18–21 (Jul. 1972); CPM-7207D0977
—Nuclear Magnetic Resonance and Weak Ferromagnetism in $FeBO_3$ (E)—M. P. Petrov, G. A. Smolenskii, A. P. Paugurt, S. A. Kizhaev and M. K. Chizhov. 14(1), 87–91 (Jul. 1972); CPM-7207D1046
—Investigation of the Structure and Magnetic Properties of $KNiPO_4$ Single Crystals (E)—A. G. Tutov, S. A. Kizhaev and M. K. Chizhov. 14(6), 1603–4(C) (Dec. 1972); CPM-7212D0939
Klassen, N. V.—Dislocation–Induced Anisotropic Absorption of Polarized Light in Cadmium Sulfide (E)—N. V. Klassen and Yu. A. Osip'yan. 14(12), 3094–5(C) (Jun. 1973); CPM-7306D0936
Klepikov, V. F.—Theory of Intermediate States in Antiferromagnets (T)—V. G. Bar'yakhtar, V. F. Klepikov, V. A. Popov and E. P. Stefanovskii. 14(4), 955–9 (Oct. 1972); CPM-7210D0770
—Phase Transitions in Polarized Media and the Role of the Inhomogeneous State (T)—V. G. Bar'yakhtar and V. F. Klepikov. 14(5), 1267–71 (Nov. 1972); CPM-7211A1519

Klimov, V. A.—Two Regions of Decomposition of Solid Solutions of Barium in Potassium Chloride Crystals (E)—G. A. Andreev and V. A. Klimov. 14(4), 890–3 (Oct. 1972); CPM-7210D0705

Klimusheva, G. V.—Exciton States in a Fluorobenzene Crystal (E)—G. V. Klimusheva and G. M. Soroka. 14(3), 794–5(C) (Sep. 1972); CPM-7209D0228

Kliya, M. O.—Spatial Decoration of Defects in CsI Crystals (E)—N. L. Sizova, M. O. Kliya, V. N. Rozhanskii and A. A. Urusovskaya. 14(3), 743–6 (Sep. 1972); CPM-7209D0177

Klokishner, S. I.—Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–3 (Apr. 1973); CPM-7304E1196

Klotsman, S. M.—Self-Diffusion of Nickel in Polycrystalline Nickel Oxide (E)—S. M. Klotsman, A. N. Timofeev and I. Sh. Trakhtenberg. 14(3), 763–5(C) (Sep. 1972); CPM-7209D0197

Klushin, N. A.—Mössbauer Effect at ^{119}Sn Impurity Atoms in Gallium in Porous Glass (E)—V. N. Bogomolov, N. A. Klushin and P. P. Seregin. 14(7), 1729–31 (Jan. 1973); CPM-7301C0689

—Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Klushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

Klyavin, O. V.—Velocity of Slip Bands with Respect to the (100) [110] and (110) [110] Systems in Sodium Chloride Crystals (E)—O. V. Klyavin, S. G. Simashko and A. V. Stepanov. 14(1), 130–5 (Jul. 1972); CPM-7207D1089

Kmita, A. M.—Acoustoelectric Effect in a Piezoelectric–Semiconductor Layered Structure (E)—A. M. Kmita and A. V. Medved'. 14(9), 2285–93 (Mar. 1973); CPM-7303E1109

Kobolev, V. I.—Reflection and Absorption of InSe Crystals in the IR Region of the Spectrum (E)—V. P. Mushinskii and V. I. Kobolev. 14(4), 1098–100(C) (Oct. 1972); CPM-7210D0913

Kocharov, A. G.—Mössbauer and Neutron–Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

Kocharyan, A. N.—Effect of a Narrow Partly Filled Band on Superconductivity in Transition and Rare–Earth Metals (T)—A. N. Kocharyan and D. I. Khomskii. 14(8), 2093–5 (Feb. 1973); CPM-7302E1219

Kochegarov, S. F.—Nonlinear Absorption of IR Radiation in Indium Antimonide (E/T)—A. M. Danishevskii, S. F. Kochegarov and V. K. Subashiev. 14(11), 2754–8 (May 1973); CPM-7305D0982

Kochelaev, B. I.—Theory of Paramagnetic Resonance Saturation in a Solid at Low Temperatures (T)—B. I. Kochelaev and R. R. Nigmatullin. 14(11), 2880–3 (May 1973); CPM-7305D1108

Kochmarskii, V. Z.—Inelastic Scattering of Slow Neutrons by Localized Vibrations of Interstitial Atoms (T)—I. P. Dzyub and V. Z. Kochmarskii. 14(1), 1–8 (Jul. 1972); CPM-7207D0960

Kodess, B. N.—Nature of Solid Solutions Based of Superconducting V_3Si (E)—Ch. V. Kopetskii, B. N. Kodess and V. A. Marchenko. 14(6), 1556–7(C) (Dec. 1972); CPM-7212D0892

Kogan, S. I.—Effect of Microinhomogeneities on the Electron Absorption of Ultrasound in n–InSb (E/T)—I. L. Drichko and S. I. Kogan. 14(11), 2856–9 (May 1973); CPM-7305D1084

Kogan, V. G.—Light Absorption by a Metal Film Displaying the Quantum Size Effect (T)—V. G. Kogan and V. A. Lavrovskii. 14 (2), 496–7(C) (Aug. 1972); CPM-7208E0653

Kolkov, S. N.—Theoretical Analysis of Polarization and of Nonlinear Optical Properties of Single Crystals (T)—D. D. Karov and S. N. Koikov. 14(12), 3064–7 (Jun. 1973); CPM-7306D0906

Kolosyuk, V. N.—Absorption Spectra and Optical Transitions in AsI_3 Single Crystals (E)—V. I. Vashchenko, V. N. Kolosyuk and G. A. Vashchenko. 14(12), 3068–70 (Jun. 1973); CPM-7306D0910

Kolotov, O. S.—Internal Effective Field During Nonuniform Rotation in Ferrite Cores (E)—O. S. Kolotov, A. A. Laptev, V. A. Pogozhev and R. V. Telesnin. 14(1), 228–9(C) (Jul. 1972); CPM-7207D1187

Kolpakov, A. V.—Interference of Hyperfine Components in the Scattering of γ Radiation by Mössbauer Nuclei (T)—A. S. Ivanov and A. V. Kolpakov. 14(6), 1537–8(C) (Dec. 1972); CPM-7212D0873

Kolpakov, V. V.—Influence of Intense Laser Radiation on Instability Threshold of Spin Waves Excited by Parallel Pumping (E)—V. N. Agartanov, V. B. Antipov, V. V. Kolpakov and E. M. Fedorin. 14 (8), 2116–7(C) (Feb. 1973); CPM-7302E1242

Kolpakova, N. N.—Optical Anisotropy and Cylindrical Domains in $(Gd,Tb,Eu)_3Fe_5O_{12}$ Ferrite Garnets (E)—R. V. Pisarev, N. N. Kolpakova, Yu. M. Yakovlev, V. S. Filonich and A. G. Titova. 14 (2), 300–2 (Aug. 1972); CPM-7208E0457

Kolpashin, M. K.—Effect of Renormalized Plasma Spectrum on the Superconductivity in Semiconductors (T)—A. A. Golub and M. K. Kolpashin. 14(7), 1695–8 (Jan. 1973); CPM-7301C0655

Komar', V. K.—Nonmonotonic Conductivity Dependence of the Sound Amplification Threshold in Piezoelectric Semiconductors (E/T)—B. L. Timan, V. D. Ryzhikov and V. K. Komar'. 14(3), 668–70 (Sep. 1972); CPM-7209D0102

Komarov, G. V.—Damping of Oscillations at the Interface Between the Solid and Liquid Phases of Bismuth by a Magnetic Field (E)—G. V. Komarov, K. A. Melikov, M. D. Petropavlovskii and A. R. Regel'. 14(2), 485–6(C) (Aug. 1972); CPM-7208E0642

Komnik, Yu. F.—Temperature Dependence of the Amplitude of the Quantum Oscillations of the Resistance of Thin Tin Films (E/T)—Yu. F. Komnik, E. I. Bukhshtab, Yu. V. Nikitin and Ch. Sulkovskii. 14(2), 543–5(C) (Aug. 1972); CPM-7208E0700

—Transformation of the "Amorphous" Phase of Bismuth Thin Films into the Crystalline Phase at Small Thicknesses (E)—B. I. Belevtsev, Yu. F. Komnik and L. A. Yatsuk. 14(7), 1887–8(C) (Jan. 1973); CPM-7301C0847

—Phase Transitions in Thin Gallium Films Produced by Low–Temperature Condensation (E/T)—B. I. Belevtsev and Yu. F. Komnik. 14(11), 2759–61 (May 1973); CPM-7305D0987

Kompaniets, T. N.—Cooperative Adsorption of Hydrogen and Deuterium on the (111) Faces of Germanium and Silicon (E)—Yu. I. Belyakov, N. I. Ionov and T. N. Kompaniets. 14(10), 2567–70 (Apr. 1973); CPM-7304E1213

Kondorskii, E. I.—Effect of Pressure on Galvanomagnetic Phenomena in Rare Earth Metals (E)—L. I. Vinokurova, E. I. Kondorskii, Kh. Rakhimova and V. Yu. Ivanov. 14(3), 613–9 (Sep. 1972); CPM-7209D0047

—Influence of Pressure on the Hall Effect in Dysprosium Single Crystals (E)—L. I. Vinokurova, E. I. Kondorskii, V. Yu. Ivanov, V. M. Murav'eva and Kh. Rakhimova. 14(12), 2981–4 (Jun. 1973); CPM-7306D0823

Kondrat'ev, E. F.—Ferromagnetic Resonance in Plastically Deformed Permalloy and Iron (E)—E. F. Kondrat'ev, V. G. Pinchuk and V. M. Slobodyanik. 14(5), 1352–3(C) (Nov. 1972); CPM-7211A1604

Konin, A. M.—Effect of Drift on Thermal Fluctuations of the Electromagnetic Field (T)—A. M. Konin and B. I. Shapiro. 14(8), 1966–8 (Feb. 1973); CPM-7302E1092

Kononenko, V. G.—Light–Scattering Investigation of Precipitation of a Supersaturated Solution of Barium in a KCl Crystal (E)—Ya. E. Geguzin and V. G. Kononenko. 14(9), 2181–6 (Mar. 1973); CPM-7303E1005

—Precipitation of Solid Solutions of Strontium and Cadmium in KCl Single Crystals (E)—V. G. Kononenko and V. D. London. 14(9), 2217–9 (Mar. 1973); CPM-7303E1041

Konoplev, Yu. M.—Simultaneous Adsorption of Cesium and Barium onto Tungsten and Niobium Crystal Surfaces (E/T)—Yu. M. Konoplev, A. G. Naumovets and A. G. Fedorus. 14(2), 273–8 (Aug. 1972); CPM-7208E0430

Konorov, P. P.—Change in the Surface Potential of Ge in an Electrolyte During Mechanical Deformation (E)—P. P. Konorov and Yu. A. Tarantov. 14(7), 1881–2(C) (Jan. 1973); CPM-7301C0841

Konorova, L. F.—Thermal Defects Silicon (E)—L. F. Konorova. 14 (6), 1610–1(C) (Dec. 1972); CPM-7212D0946

Konovalov, N. D.—Heat of Adsorption of Barium on (100) and (110) Faces of Tungsten and Molybdenum (E)—B. V. Bondarenko, N. D. Konovalov and E. A. Tishin. 14(12), 3078(C) (Jun. 1973); CPM-7306D0920

Konovalov, V. I.—Localized and Quasilocalized Vibrations in Anharmonic Raman Spin–Lattice Relaxation (T)—V. Ya. Zevin and V. I. Konovalov. 14(3), 738–42 (Sep. 1972); CPM-7209D0172

—Role of the Phonon Bottleneck in Paraelectric Relaxation (T)—V. I. Konovalov. 14(11), 2909–10(C) (May 1973); CPM-7305D1137

Konsin, P. I.—Exciton–Phonon Displacive Phase Transitions (T)—P. I. Konsin. 14(4), 978–80 (Oct. 1972); CPM-7210D0793

—Phase Transitions in Ferroelectrics Containing Hydrogen Bonds (T)—P. I. Konsin and N. N. Kristofel'. 14(10), 2484–8 (Apr. 1973); CPM-7304E1130

Kopach, V. P.—Magnetoresistance of Island Films of Metals on Insulators (E)—B. T. Boiko, L. S. Palatnik, V. P. Kopach and S. B. Melent'ev. 14(4), 1090–1(C) (Oct. 1972); CPM-7210D0905

Kopaev, Yu. V.—Effect of Interband Interactions on the Critical Temperature of the Superconducting Transition in a Semimetal (T) —Yu. V. Kopaev and R. Kh. Timerov. 14(1), 69–75 (Jul. 1972); CPM-7207D1028

—Exciton Mechanism for Superconductivity (T)—L. N. Bulaevskii, Yu. V. Kopaev and Yu. A. Kukharenko. 14(1), 92–4 (Jul. 1972); CPM-7207D1051

—Band Structure of Amorphous Zinc Oxide Doped with Carbon (E) —V. F. Korzo and Yu. V. Kopaev. 14(2), 355–9 (Aug. 1972); CPM-7208E0512

—Effect of a Strong Electromagnetic Field on the Superconducting Properties of Semiconductors (T)—V. F. Elesin and Yu. V. Kopaev. 14(3), 570–4 (Sep. 1972); CPM-7209D0004

—Behavior of an Excitonic Insulator in a Magnetic Field (T)—Yu. V. Kopaev and I. V. Tyutin. 14(4), 960–2 (Oct. 1972); CPM-7210D0775

—Instability of Two-Band Model of Metals with Respect to Annihilation Scattering (T)—Do Chan Kat and Yu. V. Kopaev. 14 (9), 2252–8 (Mar. 1973); CPM-7303E1076

—Spectrum of Plasma Oscillations in Semimetals (T)—Do Chan Kat and Yu. V. Kopaev. 14(12), 3012–4 (Jun. 1973); CPM-7306D0854

Kopetskii, Ch. V.—Nature of Solid Solutions Based of Superconducting V_3Si (E)—Ch. V. Kopetskii, B. N. Kodess and V. A. Marchenko. 14(6), 1556–7(C) (Dec. 1972); CPM-7212D0892

Koptelov, É. A.—Origin of Oriented Maxima in the Bremsstrahlung Spectra of Nonrelativistic Electrons in a Single Crystal (T)—N. P. Kalashnikov, É. A. Koptelov and M. I. Ryazanov. 14(4), 1033–4 (Oct. 1972); CPM-7210D0848

Koptsik, V. A.—Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700

Kopvillem, U. Kh.—Electron–Spin Echo from Cr^{3+} in Laser Ruby (T/E)—U. Kh. Kopvillem, B. P. Smolyakov and R. Z. Sharipov. 14 (5), 1239–40 (Nov. 1972); CPM-7211A1491

—Photon Echo in Ruby (E)—U. Kh. Kopvillem, V. R. Nagibarov, V. A. Pirozhkov, V. V. Samartsev and R. G. Usmanov. 14(6), 1544–5 (C) (Dec. 1972); CPM-7212D0880

—Effect of Coherent Sound Vibrations on γ–γ Angular Correlation (T)—U. Kh. Kopvillem and L. N. Shakhmuratova. 14(8), 2125–6 (C) (Feb. 1973); CPM-7302E1251

Korablev, V. V.—Anisotropy in the Secondary Emission Properties of Single Crystals when Scanned by an Electron Beam (E)—V. V. Korablev and V. V. Ionov. 14(3), 692–5 (Sep. 1972); CPM-7209D0126

—Influence of Surface Contamination on the Fine Structure of the Angular Characteristics of the Secondary Electron Emission Coefficient of Single Crystals (E)—V. V. Korablev. 14(6), 1539–41 (C) (Dec. 1972); CPM-7212D0875

Korchagin, Yu. A.—Effect of Boundary Conditions on the Distribution of Spins near the Surface of a Ferromagnet (T/E)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1791–3 (Jan. 1973); CPM-7301C0751

—Spin–Wave Resonance Spectrum in a Thin Ferromagnetic Layer with Mixed Boundary Conditions (T)—Yu. A. Korchagin, R. G. Khlebopros and N. S. Chistyakov. 14(7), 1826–7(C) (Jan. 1973); CPM-7301C0786

Korchemkin, M. A.—Theory of Quadrupolar Spin Echo in Polycrystalline Samples Excited by Coherent Resonance Pulses (T) —M. A. Korchemkin. 14(8), 2019–21 (Feb. 1973); CPM-7302E1145

Korchin, V. A.—Residual Action of High Pressure on the Width of Ferromagnetic Resonance Lines in $Y_3Fe_{5-x}Ga_xO_{12}$ Single Crystals (E)—V. A. Korchin, V. A. Ruban, V. V. Danilov and V. V. Zaporozhets. 14(5), 1329–30(C) (Nov. 1972); CPM-7211A1581

Korenblit, I. Ya.—Magnon Thermal Conductivity of Antiferromagnetic Metals (T)—I. Ya. Korenblit and B. G. Tankhilevich. 14(10), 2588–90 (Apr. 1973); CPM-7304E1234

Korishev, V. I.—Effect of Sn and Te Impurity on the Magnetic Susceptibility of $Bi_{88}Sb_{12}$ Alloy (E)—V. I. Korishev, G. A. Ivanov and V. L. Naletov. 14(2), 500–1(C) (Aug. 1972); CPM-7208E0657

—Influence of Additions of Ag, In, and Pt on the Transport Effects in Bismuth—Antimony Alloys (E)—G. A. Ivanov, Yu. N. Saraev and V. I. Korishev. 14(2), 539–40(C) (Aug. 1972); CPM-7208E0696

—Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14 (4), 971–4 (Oct. 1972); CPM-7210D0786

Korner, Yu. V.—Effect of Angular Dispersion of Anisotropy on the Ferromagnetic Resonance Linewidth in Thin Films (T/E)—D. I. Sementsov and Yu. V. Korner. 14(6), 1431–3 (Dec. 1972); CPM-7212D0767

Kornienko, A. A.—Theory of Exchange Interaction (T)—M. V. Eremin, A. A. Kornienko and A. M. Leushin. 14(2), 314–6 (Aug. 1972); CPM-7208E0471

—Theory of the Crystal Field in Dielectrics (T)—M. V. Eremin and A. A. Kornienko. 14(3), 644–8 (Sep. 1972); CPM-7209D0078

Kornienko, É. N.—Impurity Atoms of Sn^{119} in the Helicoidal Antiferromagnet Au_2Mn (E)—N. N. Delyagin, É. N. Kornienko and V. I. Nesterov. 14(6), 1590–1(C) (Dec. 1972); CPM-7212D0926

Korobochko, Yu. S.—Channeling Effects in the Scattering of 50–keV Electrons in Thin Copper Crystals (E)—Yu. S. Korobochko, E. L. Berezovskii, B. D. Grachev, S. S. Kozlovskii and V. I. Mineev. 14 (11), 2812–4 (May 1973); CPM-7305D1040

Korolev, L. M.—Surface "Pyroelectric" Effect in Insulating Films (T/E)—L. M. Blinov, S. V. Ermakov and L. M. Korolev. 14(12), 3073–4(C) (Jun. 1973); CPM-7306D0915

Koroleva, L. I.—Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Korolyuk, A. P.—Acoustoelectric Effect in Tellurium (E)—A. P. Korolyuk and V. F. Roi. 14(1), 211–2(C) (Jul. 1972); CPM-7207D1170

Korotaev, N. N.—Absorption of Light in a Silver Bromide Emulsion Layer (E)—N. N. Korotaev. 14(9), 2367(C) (Mar. 1973); CPM-7303E1191

—Photo–EMF Spectrum of a Silver Bromide Emulsion Film (E)—N. N. Korotaev and P. V. Meiklyar. 14(10), 2656–7(C) (Apr. 1973); CPM-7304E1302

Korotkov, V. I.—Intensity of Induced Mandelstam–Brillouin Scattering in Glasses (E)—V. M. Rysakov and V. I. Korotkov. 14 (7), 1645–8 (Jan. 1973); CPM-7301C0605

Korst, N. N.—Equations for Nuclear Quadrupole Relaxation in Molecular Crystals Allowing for Nondiagonal Elements of the Density Matrix (T)—N. N. Korst, V. V. Tsyganov and N. E. Ainbinder. 14(8), 2118–9(C) (Feb. 1973); CPM-7302E1244

Korsunskii, M. I.—Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585

—Characteristic Energy Loss Spectra of Electrons from La, Ce, Pr, and Nd Surfaces (E)—V. V. Zashkvara, E. V. Tsveiman, M. I. Korsunskii and V. S. Red'kin. 14(6), 1564–6(C) (Dec. 1972); CPM-7212D0900

—Interpretation of the Energy–Loss Peaks in the Range 30–70 eV in the Spectra of Electrons Reflected from Transition Metals (E)—V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin and K. Sh. Chokin. 14(7), 1891–2(C) (Jan. 1973); CPM-7301C0851

Koryagin, V. F.—Paramagnetic Ions of Gd^{3+} and Mn^{2+} in an ScF_3 Crystal (E)—L. S. Starostina, B. N. Grechushnikov and V. F. Koryagin. 14(12), 2936–8 (Jun. 1973); CPM-7306D0778

Korzo, V. F.—Band Structure of Amorphous Zinc Oxide Doped with Carbon (E)—V. F. Korzo and Yu. V. Kopaev. 14(2), 355–9 (Aug. 1972); CPM-7208E0512

Koshkin, V. M.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Kosilov, A. T.—Investigation of the Dislocation Structure of Stretch–Deformed Copper Whiskers by Analysis of Lattice Disorientations (E)—V. S. Postnikov, A. M. Belikov, A. T. Kosilov and V. B. Shepilov. 14(6), 1529–30(C) (Dec. 1972); CPM-7212D0865

Kosobukin, V. A.—Calculation of the Distribution of Stresses between Atomic Bonds from Infrared Spectroscopy Data (T/E)—V. A. Kosobukin. 14(9), 2246–51 (Mar. 1973); CPM-7303E1070

Kosonogov, N. A.—Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Kostadinov, I. Z.—Hopping Mobility in Compensated Semiconductors (T)—I. Z. Kostadinov and V. L. Pokrovskii. 14(8), 1901–5 (Feb. 1973); CPM-7302E1027

Kostina, É. N.—Specific Heat Anomaly near an Orientational Phase Transition in Ammonium Bromide (E)—É. N. Kostina and G. A. Mil'ner. 14(11), 2923–5(C) (May 1973); CPM-7305D1151

Kotel'nikov, I. N.—Raman–Nath Scattering of Light by Magnetostatic Waves (E)—N. N. Kiryukhin, I. N. Kotel'nikov and F. V. Lisovskii. 14(12), 3087–8(C) (Jun. 1973); CPM-7306D0929

Kotelyanskii, I. M.—Surface Electric Field Arising from Three–Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Koteteshvili, V. G.—Excitation of Longitudinal Electromagnetic Waves by an Electron Beam in the Plasma of a Solid (T)—R. R. Kikvidze, V. G. Koteteshvili and A. A. Rukhadze. 14(1), 146–8 (Jul. 1972); CPM-7207D1105

Kotetishvili, V. G.—Emission Intensity from a Solid–State Plasma with Development of the Bunch Instability (T)—R. R. Kikvidze, V. G. Kotetishvili and A. A. Rukhadze. 14(8), 1931–4 (Feb. 1973); CPM-7302E1057

Kotov, B. A.—Some Electronic Properties of Heavily Doped p–Type GaAs (E)—K. P. Abdurakhmanov, B. A. Kotov, N. M. Okuneva, É. L. Plachenova and O. A. Usov. 14(9), 2234–6 (Mar. 1973); CPM-7303E1058

Kovalenok, P. V.—Calculation of Phonon Absorption of Ultrasonic Waves in Alkali Halide Crystals (T/E)—P. V. Kovalenok and L. G. Merkulov. 14(2), 283–6 (Aug. 1972); CPM-7208E0440

Kovalev, O. V.—Relationship between Directions of Electric and Magnetic Polarizations in Boracite and Other Crystals (T)—O. V. Kovalev. 14(1), 258–60(C) (Jul. 1972); CPM-7207D1217

—Structures with Exchange Interactions of the Electric and Magnetic Polarizations (T)—O. V. Kovalev. 14(4), 826–31 (Oct. 1972); CPM-7210D0641

Kovaleva, N. P.—Mössbauer and Neutron–Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

Kovalevskaya, Yu. A.—Influence of Pressure on the Thermodynamic Properties of NH_4Cl near the Phase Transition Point (E)—E. B. Amitin, Yu. A. Kovalevskaya and I. E. Paukov. 14(11), 2902–3(C) (May 1973); CPM-7305D1130

Kovarskii, V. A.—Multiphoton Interband Transitions in a Quantizing Magnetic Field (T)—I. A. Chaikovskii, V. A. Kovarskii and E. Yu. Perlin. 14(3), 620–4 (Sep. 1972); CPM-7209D0054

—Light Absorption by a Crystal Subjected to an Intense Laser Bias (T)—É. P. Sinyavskii and V. A. Kovarskii. 14(7), 1846–7(C) (Jan. 1973); CPM-7301C0806

Kovenskii, I. I.—State of Nickel Atoms in a Nickel–Chromium Alloy (E)—D. F. Kalinovich, I. I. Kovenskii and M. D. Smolin. 14(12), 3098–9(C) (Jun. 1973); CPM-7306D0940

Kovtun, A. A.—Structure and Conversion of Hole Centers in KCl(NaCl) Crystals (E)—P. K. Gorbenko and A. A. Kovtun. 14(4), 1046–7(C) (Oct. 1972); CPM-7210D0861

Kovtun, N. M.—NMR Study of Spin Reorientation in the Weak Ferromagnet $ErFeO_3$ (E/T)—N. M. Kovtun, A. S. Karnachev, E. E. Solov'ev, A. Ya. Chervonenkis and A. A. Shemyakov. 14(7), 1856–8(C) (Jan. 1973); CPM-7301C0816

—Magnetostriction of Polycrystalline Holmium and Dysprosium Orthoferrites (E/T)—V. A. Borodin, A. M. Kadomtseva, N. M. Kovtun and V. A. Khokhlov. 14(8), 1950–2 (Feb. 1973); CPM-7302E1076

—NMR Investigation of Electron Ordering in Magnetite (E)—N. M. Kovtun, E. E. Solov'ev and A. A. Shemyakov. 14(9), 2430–1(C) (Mar. 1973); CPM-7303E1254

Kozazhevskii, B.—Interaction of the Conduction Electrons with a Magnetic Impurity in the Anderson Model (T)—B. Kozazhevskii. 14(1), 190–3 (Jul. 1972); CPM-7207D1149

Kozhukhar', A. Yu.—ESR Spectrum of Cr^{3+} Ions in $LiGa_5O_8$ at Low Temperatures (E)—A. Yu. Kozhukhar', V. N. Seleznev, G. A. Tsintsadze and V. A. Shapovalov. 14(11), 2892–3(C) (May 1973); CPM-7305D1120

Kozlov, É. V.—Fine Structure of a Moving Superdislocation (T)—V. T. Neumerzhitskii and É. V. Kozlov. 14(6), 1428–30 (Dec. 1972); CPM-7212D0764

Kozlovskaya, E. P.—"Deformation Memory" in Crystals (E/T)—V. G. Govorkov, G. V. Berezhkova, V. R. Regel' and E. P. Kozlovskaya. 14(2), 546(C) (Aug. 1972); CPM-7208E0703

Kozlovskii, M. I.—Special Characteristics of the Thermo–EMF of Thin Bismuth Films (E)—V. I. Burchakova, D. V. Gitsu and M. I. Kozlovskii. 14(3), 775–6(C) (Sep. 1972); CPM-7209D0209

Kozlovskii, S. S.—Channeling Effects in the Scattering of 50–keV Electrons in Thin Copper Crystals (E)—Yu. S. Korobochko, E. L. Berezovskii, B. D. Grachev, S. S. Kozlovskii and V. I. Mineev. 14(11), 2812–4 (May 1973); CPM-7305D1040

Kozyrev, V. K.—Delay in Secondary Electron Emission from Substances (E)—A. M. Tyutikov and V. K. Kozyrev. 14(6), 1605–6(C) (Dec. 1972); CPM-7212D0941

Kozyreva, M. S.—Optical Properties $\rho(V_2O_3)$ in the Region of the Phase Transition (E/T)—M. S. Kozyreva, V. N. Novikov and B. A. Tallerchik. 14(3), 639–43 (Sep. 1972); CPM-7209D0073

Kraftmakher, Ya. A.—Vacancy Equilibrium and Thermal Expansion of Tungsten at High Temperatures (E)—Ya. A. Kraftmakher. 14(2), 325–7 (Aug. 1972); CPM-7208E0482

Krainik, N. N.—Anomalous Behavior of the Optical Absorption Coefficient of Lead Magnoniobate Single Crystals in the Region of a Broad Ferroelectric Transition (E)—L. S. Kamzina, N. N. Krainik and N. N. Nesterova. 14(7), 1853–5(C) (Jan. 1973); CPM-7301C0813

—Temperature Dependence of the Relaxation Time T_2 of the Electroacoustic Echo in Some Piezoelectric Crystals (E)—S. N. Popov and N. N. Krainik. 14(9), 2408–9(C) (Mar. 1973); CPM-7303E1232

Krasil'nikov, O. M.—Relationship between Elastic Moduli at Finite Temperatures (T)—Yu. Kh. Vekilov, O. M. Krasil'nikov and Yu. A. Lisovskii. 14(10), 2634–5(C) (Apr. 1973); CPM-7304E1280

Krasil'nikov, V. A.—Dispersion of Elastic Waves in Ferroelectrics (T/E)—K. K. Ermilin, V. A. Krasil'nikov and V. M. Prokhorov. 14(1), 251–2(C) (Jul. 1972); CPM-7207D1210

—Self–Interaction of Finite–Amplitude Magnetoelastic Waves (E)—Dao Tkhu Nguyen, V. A. Krasil'nikov, S. B. Samorukov and V. I. Uchastkin. 14(10), 2632–3(C) (Apr. 1973); CPM-7304E1278

Krasilov, Yu. I.—Temperature Broadening and Shift of Phononless Lines in Luminescence Spectra of Crystals of Uranyl Compounds (E/T)—R. N. Shchelokov, Yu. I. Krasilov and V. E. Karasev. 14(7), 1885–6(C) (Jan. 1973); CPM-7301C0845

Krasko, G. L.—Theory of Pseudopotentials and Vegard's Rule in Alloys of Alkali Metals (T)—G. L. Krasko and Z. A. Gurskii. 14(2), 269–72 (Aug. 1972); CPM-7208E0426

Krentsis, R. P.—Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

—Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

—Anisotropy of the Thermal Conductivity and Thermal Diffusivity in Iron Digermanide (E)—R. P. Krentsis, K. I. Meizer and P. V. Gel'd. 14(10), 2601–2 (Apr. 1973); CPM-7304E1247

Krestnikov, S. E.—Theory of the ESR Spectra of a Pair of Paramagnetic Ions Allowing for Antisymmetrical Exchange Interaction (T)—V. I. Cherepanov, S. E. Krestnikov and A. I. Krotkii. 14(8), 1990–2 (Feb. 1973); CPM-7302E1116

Krevs, V. E.—Quantum Oscillations of the Magnetoresistance of $Cd_xHg_{1-x}Te$ (E)—N. N. Berchenko, V. E. Krevs and M. V. Pashkovskii. 14(9), 2447–8(C) (Mar. 1973); CPM-7303E1271

Kristofel', N. N.—Phase Transitions in Ferroelectrics Containing Hydrogen Bonds (T)—P. I. Konsin and N. N. Kristofel'. 14(10), 2484–8 (Apr. 1973); CPM-7304E1130

Krivenko, L. F.—Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744

Krivoglaz, M. A.—Effect of Fluctuons on the Equilibrium Properties of Semiconductors (T)—M. A. Krivoglaz. 14(7), 1801–9 (Jan. 1973); CPM-7301C0761

Krivosheev, V. K.—Magnetic Characteristics of Superconducting Mercury in Chrysotile Asbestos (E)—V. N. Bogomolov and V. K. Krivosheev. 14(4), 1059–60(C) (Oct. 1972); CPM-7210D0874

Krolevets, N. M.—Luminescence of Single Crystals of the Ferroelectric Semiconductor SbSI (E)—M. K. Sheinkman, N. M. Krolevets, É. A. Savchenko and L. N. Tatarenko. 14(1), 253–4(C) (Jul. 1972); CPM-7207D1212

Kropotov, V. S.—Electron Spin Resonance of V^{2+} Ions in BaF_2 (E)—R. Yu. Abdulsabirov, V. S. Kropotov, M. S. Orlov and V. G. Stepanov. 14(11), 2917(C) (May 1973); CPM-7305D1145

Krotkii, A. I.—Theory of the ESR Spectra of a Pair of Paramagnetic Ions Allowing for Antiasymmetrical Exchange Interaction (T)—V. I. Cherepanov, S. B. Krestnikov and A. I. Krotkii. 14(8), 1990–2 (Feb. 1973); CPM-7302E1116

Kruglov, I. I.—Influence of Structure Defects on the Electrical Properties and Luminescence of α-SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206

Kruglov, M. V.—X-Ray Induced Electron Emission from Perfect Germanium Single Crystals Under (111) Bragg Reflection Conditions (E)—V. N. Shchemelev and M. V. Kruglov. 14(12), 2988–91 (Jun. 1973); CPM-7306D0830

Krutikov, V. F.—Magnetic Properties of Tl^{2+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682

—ESR of Hg^+ Ions in K_2SO_4 Crystals (E)—V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(10), 2642–3(C) (Apr. 1973); CPM-7304E1288

Krynetskaya, I. B.—Dependence of High-Field Susceptibility of Iron–Nickel Alloys on Concentration (E)—V. E. Rode and I. B. Krynetskaya. 14(2), 533–4(C) (Aug. 1972); CPM-7208E0690

Krynetskii, I. B.—Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Ledneva, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158

—Distinguishing Features of Magnetic Properties of Single-Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1558

Kucherenko, L. P.—Optical Phonons in Amorphous Films of Arsenic Chalcogenides (E)—V. P. Zakharov, V. S. Gerasimenko and L. P. Kucherenko. 14(8), 2138–9(C) (Feb. 1973); CPM-7302E1264

Kudenko, Yu. A.—Group-Theoretic Classification of the States of Pairs of Impurity Ions Having an Unfilled and a Filled d Shell (T)—Yu. A. Kudenko and A. P. Slivinskii. 14(11), 2670–1 (May 1973); CPM-7305D0898

Kudinov, E. K.—Possibility of Electromagnetic Radiation During Phase Transitions (T)—V. N. Bogomolov, E. K. Kudinov and Yu. A. Firsov. 14(7), 1788–90 (Jan. 1973); CPM-7301C0748

Kudryashova, L. K.—Magnetoelastic Attenuation in Nickel at High Ultrasonic Frequencies (E/T)—S. B. Grigor'ev and L. K. Kudryashova. 14(7), 1726–8 (Jan. 1973); CPM-7301C0686

Kudykina, T. A.—High-Symmetry Exciton in Alkali Halide Crystals (T)—T. A. Kudykina and K. B. Tolpygo. 14(2), 535–6(C) (Aug. 1972); CPM-7208E0692

—D_{3h} Exciton in an Alkali Halide Crystal (E)—T. A. Kudykina and K. B. Tolpygo. 14(9), 2187–91 (Mar. 1973); CPM-7303E1011

Kudzin, A. Yu.—Influence of the Amplitude of Free Vibrations on the Permittivity of $BaTiO_3$ Single Crystals (E)—E. P. Kashchenko and A. Yu. Kudzin. 14(4), 1085–6(C) (Oct. 1972); CPM-7210D0900

—Stabilization of Spontaneous Polarization of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and T. V. Panchenko. 14(6), 1599–600(C) (Dec. 1972); CPM-7212D0935

—Barkhausen Jumps and Stabilization of the Spontaneous Polarization of Single Crystals of $BaTiO_3$ (E)—V. M. Rudyak, A. Yu. Kudzin and T. V. Panchenko. 14(8), 2112–3(C) (Feb. 1973); CPM-7302E1238

—Influence of Domain Structure on the Internal Friction of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and E. P. Kashchenko. 14(8), 2171–2(C) (Feb. 1973); CPM-7302E1297

Kukharenko, Yu. A.—Exciton Mechanism for Superconductivity (T)—L. N. Bulaevskii, Yu. V. Kopaev and Yu. A. Kukharenko. 14(1), 92–4 (Jul. 1972); CPM-7207D1051

—Optical Properties of Quasi-One-Dimensional and Quasi-Two-Dimensional Crystals (T)—L. N. Bulaevskii and Yu. A. Kukharenko. 14(8), 2076–80 (Feb. 1973); CPM-7302E1202

Kukharskii, A. A.—Damping Effects on the Plasmon–Phonon Spectrum of a Solid (T)—A. A. Kukharskii. 14(6), 1501–6 (Dec. 1972); CPM-7212D0837

Kuksenko, V. S.—Kinetics of the Formation of Submicroscopic Cracks in Polymers Under Load (E)—M. A. Gezalov, V. S. Kuksenko and A. I. Slutsker. 14(2), 344–8 (Aug. 1972); CPM-7208E0501

—Accelerating Effect of Ultraviolet Radiation on Submicroscopic Crack Formation in Loaded Polymers (E)—Kh. Akimbekov, V. S. Kuksenko, S. Nizamidinov, A. I. Slutsker and A. A. Yastrebinskii. 14(9), 2339–43 (Mar. 1973); CPM-7303E1163

Kulakova, L. A.—Investigation of the Acoustoelectric Instability in CdS by the Scattering of Light by Sound (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(1), 76–82 (Jul. 1972); CPM-7207D1035

—Acoustooptical Investigation of Sound Wave Interactions in Cadmium Sulfide (E)—A. M. D'yakonov, Yu. V. Ilisavskii and L. A. Kulakova. 14(9), 2259–63 (Mar. 1973); CPM-7303E1083

Kuleshov, E. A.—Influence of Channeling on the Scintillation Efficiency of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(1), 209–10(C) (Jul. 1972); CPM-7207D1168

—Orientational Dependence of the Scintillation Yield of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(4), 1073–4(C) (Oct. 1972); CPM-7210D0888

Kuliev, Sh. A.—Nonlinear Theory for The Excitation of Short-Wavelength Surface Galvanomagnetic Waves (T)—I. V. Ioffe and Sh. A. Kuliev. 14(7), 1823(C) (Jan. 1973); CPM-7301C0783

Kulik, V. N.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Kulikov, G. S.—Diffusion, Electrotransport, and Solubility of Manganese Impurities in Silicon (E)—M. K. Bakhadyrkhanov, B. I. Boltaks and G. S. Kulikov. 14(6), 1441–4 (Dec. 1972); CPM-7212D0777

—Diffusion and Solubility of Co in GaAs (E)—G. S. Kulikov and I. N. Nikulitsa. 14(9), 2335–8 (Mar. 1973); CPM-7303E1159

Kul'kov, V. D.—Hyperfine Fields at Al, P, Sc, and Ta Nuclei in an Fe Matrix (E)—V. D. Kul'kov. 14(2), 557–8(C) (Aug. 1972); CPM-7208E0714

Kulyupin, Yu. A.—Changes in the Work Function of Electrons Emitted from Centers in Gold Films Activated with Barium Oxide (E)—Yu. A. Kulyupin and R. D. Fedorovich. 14(10), 2663–4(C) (Apr. 1973); CPM-7304E1309

Kumakhov, M. A.—Method for Determining the Thermal Vibration Amplitude of an Impurity Atom Using the Channeling Effect (T)—M. A. Kumakhov. 14(4), 963–5 (Oct. 1972); CPM-7210D0778

Kumakov, V. M.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Kunevich, A. V.—Nuclear Magnetic Resonance in Ferroxplan Ferrites (E/T)—A. V. Kunevich, M. P. Petrov and B. N. Ermakov. 14(8), 2131–2(C) (Feb. 1973); CPM-7302E1257

Kunigelis, V. F.—Acoustic Investigations of Sb_2S_3 Crystals (E)—I. P. Grigas, V. F. Kunigelis, A. S. Orlyukas and V. I. Samulionis. 14(3), 796–7(C) (Sep. 1972); CPM-7209D0230

Kurbanov, M. M.—Anisotropic Linear Expansion and the Isothermal Compressibility of a GaSe Single Crystal (E)—N. G. Aliev, I. G. Kerimov, M. M. Kurbanov and T. A. Mamedov. 14(5), 1304–5(C) (Nov. 1972); CPM-7211A1556

—Thermal Expansion and Isothermal Compressibility of Indium Chalcogenide Single Crystals (E)—N. G. Aliev, I. G. Kerimov and M. M. Kurbanov. 14(12), 3106–7(C) (Jun. 1973); CPM-7306D0948

Kurbatov, L. V.—Theory of Ferromagnetic Resonance in Single Crystals with Anisotropic g Factor (T)—N. F. Balakhonov, L. V. Kurbatov and A. V. Shitikov. 14(1), 101–5 (Jul. 1972); CPM-7207D1060

Kurdyumov, V. G.—Slip Polygonization in Silicon Iron Single Crystals Deformed by Tensile Forces (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(4), 1075–6(C) (Oct. 1972); CPM-7210D0890

—Polygonization by Slip in Silicon Iron Single Crystals Deformed by Tension at −196°C (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(8), 2110–1(C) (Feb. 1973); CPM-7302E1236

Kurguzov, A. I.—Spin–Spin Relaxation in Thin Ferromagnetic Films (T)—N. G. Golubeva and A. I. Kurguzov. 14(7), 1832–4(C) (Jan. 1973); CPM-7301C0792

Kurik, M. V.—Electrical Conductivity of Diphenylpolyene Films (E)—N. I. Ganushchak, N. I. Gritsenko and M. V. Kurik. 14(4), 1071–2(C) (Oct. 1972); CPM-7210D0886

—Temperature Dependence of the Photoconductivity Spectrum of Anthracene (E/T)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(5), 1241–4 (Nov. 1972); CPM-7211A1493

—Photovoltaic Effect in Anthracene Crystals (E)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(8), 2035–9 (Feb. 1973); CPM-7302E1161

Kurkin, I. N.—Compensation of the Excess Charge During Activation of Scheelites with Rare-Earth Ions (E)—R. Yu. Abdulsabirov, A. A. Antipin, I. N. Kurkin, E. A. Tsvetkov, Yu. K. Chirkin and V. I. Shlenkin. 14(1), 255–7(C) (Jul. 1972); CPM-7207D1214

—Spin–Lattice Relaxation of Mo^{3+} Ions in $LaNbO_4$ Single Crystals (E)—I. N. Kurkin, Yu. K. Chirkin and V. I. Shlenkin. 14(9), 2348–51 (Mar. 1973); CPM-7303E1172

Kurkin, Yu. P.—Superconducting Properties of Tellurium at Pressures up to 260 kbar (E)—I. V. Berman, Zh. I. Bynzarov and Yu. P. Kurkin. 14(9), 2192–4 (Mar. 1973); CPM-7303E1016

Kushnir, L. P.—X-Ray Diffraction Investigation of the Substructure of Iron Microcrystals (E)—L. P. Kushnir and E. F. Sidokhin. 14(8), 2129–30(C) (Feb. 1973); CPM-7302E1255

Kuskov, V. I.—Elastic Constants of ZnSe (E)—V. I. Kuskov, A. P. Rusakov and A. N. Mentser. 14(7), 1869–70(C) (Jan. 1973); CPM-7301C0829

Kutsaev, V. A.—Temperature Dependences of the Electron Effective Mass and Mobility in $Bi_2Te_{3-x}Se_x$ (E/T)—B. M. Gol'tsman, V. A. Kutasov and L. N. Luk'yanova. 14(4), 868–71 (Oct. 1972); CPM-7210D0683

Kut'ko, V. I.—Optical–Phonon Spectrum of the Antiferromagnetic Semiconductor MnTe (E)—L. V. Povstyanyi, V. I. Kut'ko and A. I. Zvyagin. 14(5), 1346–7(C) (Nov. 1972); CPM-7211A1598

—Far-Infrared Absorption Spectrum of Antiferromagnetic Nickel Tungstate (E)—V. I. Kut'ko, V. M. Naumenko and A. I. Zvyagin. 14(11), 2900–1(C) (May 1973); CPM-7305D1128

Kuvshinskii, E. V.—Dynamic Elasticity of Polyolefins (E/T)—Yu. A. Antsupov, V. P. Volodin, E. V. Kuvshinskii and Yu. N. Fedorov. 14(4), 952–4 (Oct. 1972); CPM-7210D0767

Kuzina, V. V.—Thermal Conductivity of Ion-Radical Salts of Tetracyanoquinodimethane (E)—A. V. Petrov, Yu. G. Nurullaev, R. M. Vlasova, V. V. Kuzina and A. I. Sherle. 14(6), 1594–5(C) (Dec. 1972); CPM-7212D0930

Kuz'min, R. N.—Effective Magnetic Fields at the Diamagnetic Tin Atoms in $MnSn_2$ (E)—V. A. Golovnin, S. B. Zezin and R. N. Kuz'min. 14(5), 1313–5(C) (Nov. 1972); CPM-7211A1565

Kuz'min, Yu. M.—Impurity Levels in Exciton Insulators (T)—Yu. M. Kuz'min. 14(7), 1634–7 (Jan. 1973); CPM-7301C0594

Kuz'minov, Yu. S.—Second-Harmonic Generation in Lithium Niobate (E/T)—L. I. Ivleva, Yu. S. Kuz'minov and L. S. Shumskaya. 14(11), 2686–9 (May 1973); CPM-7305D0914

Kuznetsov, A. I.—Photoconductivity of Al_2O_3 in the Region near the Intrinsic Absorption Edge (E)—É. R. Il'mas and A. I. Kuznetsov. 14(5), 1255–8 (Nov. 1972); CPM-7211A1507

Kuznetsov, V. A.—Investigation of the Surface Self-Diffusion of the Alloy W+Re in a Field-Emission Electron Microscope (E)—V. A. Kuznetsov. 14(8), 2135–7(C) (Feb. 1973); CPM-7302E1261

Kvirikadze, A. G.—Ground State and Phase Transition in a Ferromagnetic Plate Subjected to a Magnetic Field (T)—V. G. Bar'yakhtar and A. G. Kvirikadze. 14(2), 549–50(C) (Aug. 1972); CPM-7208E0706

—Radiation from Magnets during First-Order Phase Transformations (T)—B. A. Ivanov and A. G. Kvirikadze. 14(3), 592–5 (Sep. 1972); CPM-7209D0026

—Parametric Excitation of Hypersound in Ferromagnets (T)—A. I. Akhiezer, V. G. Bar'yakhtar and A. G. Kvirikadze. 14(3), 757–9 (Sep. 1972); CPM-7209D0191

—Parametric Excitation of Hypersound in Antiferromagnets (T)—B. A. Ivanov and A. G. Kvirikadze. 14(8), 1976–8 (Feb. 1973); CPM-7302E1102

—Instability of Uniform Oscillations of the Magnetic Moment of a Ferromagnet (T)—V. G. Bar'yakhtar, B. A. Ivanov and A. G. Kvirikadze. 14(9), 2385–6(C) (Mar. 1973); CPM-7303E1209

Kyutt, R. N.—Intensities of X-Ray Reflections from the Basal Plane in Silicon Carbide (E)—R. N. Kyutt and A. S. Tregubova. 14(12), 3008–11 (Jun. 1973); CPM-7306D0850

L

Laikhtman, B. D.—Influence of Screening of the Width of the "Acoustic" Forbidden Band (T)—B. D. Laikhtman and Yu. V. Pogorel'skii. 14(9), 2393–5(C) (Mar. 1973); CPM-7303E1217

Lang, I. G.—Galvanomagnetic and Thermomagnetic Effects in p-Type InSb (E)—P. V. Tamarin, S. S. Shalyt, I. G. Lang and S. T. Pavlov. 14(1), 47–57 (Jul. 1972); CPM-7207D1006

Laptev, A. A.—Internal Effective Field During Nonuniform Rotation in Ferrite Cores (E)—O. S. Kolotov, A. A. Laptev, V. A. Pogozhev and R. V. Telesnin. 14(1), 228–9(C) (Jul. 1972); CPM-7207D1187

Larkina, T. I.—Effect of a Glass–Crystal Phase Transition on the Spin–Lattice Relaxation Time (E)—I. G. Gusakovskaya, T. I. Larkina and V. I. Gol'danskii. 14(9), 2274–6 (Mar. 1973); CPM-7303E1098

Laukhin, V. N.—Pressure-Induced Transition in RbI at Low Temperatures (E)—V. N. Laukhin, A. G. Rabin'kin and É. I. Éstrin. 14(6), 1551–3(C) (Dec. 1972); CPM-7212D0887

Lavrovskii, V. A.—Light Absorption by a Metal Film Displaying the Quantum Size Effect (T)—V. G. Kogan and V. A. Lavrovskii. 14(2), 496–7(C) (Aug. 1972); CPM-7208E0653

Lazarev, G. L.—Theory of the Anomalous Hall Effect in Ferromagnetic Semiconductors with Strong s–d Coupling (T)—G. L. Lazarev. 14(1), 22–6 (Jul. 1972); CPM-7207D0981

—Theory of the Anomalous Nernst–Ettingshausen Effect in Ferromagnetic Semiconductors (T)—G. L. Lazarev. 14(10), 2591–4 (Apr. 1973); CPM-7304E1237

Lazareva, L. V.—Magnetoresistance of Gadolinium and Holmium in Strong Effective Fields (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14(3), 655–7 (Sep. 1972); CPM-7209D0089

—Hall Effect in Gadolinium in Fields up to 46 kOe at Liquid–Helium Temperatures (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14(9), 2224–6 (Mar. 1973); CPM-7303E1048

Lazarik–El'tsufin, V. T.—Excitation of Ultrasound in Metals by a Beam of Charged Particles (T)—I. A. Akhiezer and V. T. Lazarik–El'tsufin. 14(12), 3093(C) (Jun. 1973); CPM-7306D0935

Lebed', B. M.—Ferromagnetic Resonance in Gadolinium Aluminum Iron Garnets near the Compensation Points (E)—B. M. Lebed' and V. I. Mosel'. 14(11), 2781–3 (May 1973); CPM-7305D1009

Lebedev, S. Ya.—Relaxation of the Electron Emission from Germanium Bombarded with N^+_2 and Kr^+ Ions (E)—N. M. Omel'yanovskaya and S. Ya. Lebedev. 14(6), 1542–3(C) (Dec. 1972); CPM-7212D0878

—Temperature and Current Studies of the Relaxation Effect in Ion–Electron Emission in Si (E)—N. M. Omel'yanovskaya, S. Ya. Lebedev and S. D. Panin. 14(7), 1895–6(C) (Jan. 1973); CPM-7301C0855

—The "Shadow Effect" in the Bombardment of Single Crystals by Heavy Ions (E)—S. D. Panin, S. Ya. Lebedev and V. E. Dubinskii. 14(8), 2123–4(C) (Feb. 1973); CPM-7302E1249

Lebedev, V. P.—Change in the Electrical Resistivity of Lead after Creep in the Normal and Superconducting States (E)—I. A. Gindin, V. P. Lebedev and Yu. D. Starodubov. 14(7), 1748–51 (Jan. 1973); CPM-7301C0708

Lebedev, Ya. S.—Diffusion Processes in Irradiated Molecular Crystals (E/T)—A. I. Mikhailov, A. I. Bol'shakov, Ya. S. Lebedev and V. I. Gol'danskii. 14(4), 1000–6 (Oct. 1972); CPM-7210D0815

—Determination of the Probability of $\Delta M_S=2$ Transitions in ESR Spectra by Microwave Saturation Method (E)—O. Ya. Grinberg, A. A. Dubinskii, B. V. Ozherel'ev, A. A. Chistota and Ya. S. Lebedev. 14(11), 2886–7(C) (May 1973); CPM-7305D1114

Lebedeva, N. I.—Formation of Luminescence Centers in Nonactivated Alkali Halide Crystals in Very Strong Electric Fields (E)—N. I. Lebedeva and N. S. Nesmelov. 14(4), 1106–7(C) (Oct. 1972); CPM-7210D0921

Lebedeva, N. N.—Influence of Nonequilibrium Carriers on the Domain Structure of the Ferroelectric Semiconductor SbSI (E)—B. S. Agaronov, N. M. Bezdetnyi, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(1), 205–6(C) (Jul. 1972); CPM-7207D1164

—Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634

—Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Ledneva, T. M.—Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Ledneva, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158
—Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shiyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247
Leiman, V. L.—Tunnel Ionization of Excited In^+ Centers in KCl:In (E)—V. I. Leiman. 14(12), 3057–60 (Jun. 1973); CPM-7306D0899
Lemanov, V. V.—Light Scattering by Elastic Waves in Uniaxial Crystals (T/E)—V. V. Lemanov and O. V. Shakin. 14(1), 184–9 (Jul. 1972); CPM-7207D1143
—Elastic Wave Damping in Cubic Crystals According to the Akhiezer Mechanism (E)—V. Ya Avdonin, V. V. Lemanov, I. A. Smirnov and V. V. Tikhonov. 14(3), 747–52 (Sep. 1972); CPM-7209D0181
—Investigation of High-Frequency Acoustic Harmonics in Alkaline-Earth Metal Fluorides by Means of Brafl Light Scattering (E/T)—O. V. Shakin and V. V. Lemanov. 14(5), 1189–92 (Nov. 1972); CPM-7211A1441
—Erratum: Photoelastic Constants of Alkaline Earth Fluorides [13, 3142 (1972,12)] (E)—O. V. Shakin, M. F. Bryzhina and V. V. Lemanov. 14(5), 1370 (Nov. 1972); CPM-7211A1622
—Interaction of Transverse Elastic Waves with Spin Waves in the Uniaxial Ferromagnet $RbNiF_3$ (E/T)—A. N. Grishmanovskii, V. V. Lemanov, G. A. Smolenskii and P. P. Syrnikov. 14(8), 2050–2 (Feb. 1973); CPM-7302E1176
—Generation of Harmonics of Transverse Elastic Waves in Crystals (E)—V. V. Lemanov and N. K. Yushin. 14(8), 2053–6 (Feb. 1973); CPM-7302E1179
Leonidova, G. G.—High-Pressure Phase Transitions of the First Kind in Rochelle Salt (E)—V. P. Mylov, G. G. Leonidova and B. R. Churagulov. 14(7), 1893–4(C) (Jan. 1973); CPM-7301C0853
Leonov, E. M.—Optical Orientation of Excitons and the Hanley Effect in Gallium Selenide (E)—Yu. P. Veshchunov, B. P. Zakharchenya and E. M. Leonov. 14(9), 2312–4 (Mar. 1973); CPM-7303E1136
Lepishev, A. A.—Initial Permeability of Magnetite in the Region of the Low-Temperature Phase Transition (E)—Yu. D. Tropin and A. A. Lepishev. 14(10), 2654–5(C) (Apr. 1973); CPM-7304E1300
Letfulov, B. M.—Indirect Exchange Interaction Involving Photoelectrons (T)—A. A. Berdyshev and B. M. Letfulov. 14(7), 1824–5(C) (Jan. 1973); CPM-7301C0784
Leushin, A. M.—Theory of Exchange Interaction (T)—M. V. Eremin, A. A. Kornienko and A. M. Leushin. 14(2), 314–6 (Aug. 1972); CPM-7208E0471
—Direct Exchange Interaction Between Ions with Partly Filled 3d Shells (T)—R. L. Garifullina, M. V. Eremin and A. M. Leushin. 14(2), 317–24 (Aug. 1972); CPM-7208E0474
Levanyuk, A. P.—Frequency and Temperature Dependences of the Complex Dielectric Constant of Ferroelectrics near the Curie Point (T)—A. P. Levanyuk and N. V. Shchedrina. 14(4), 1027–32 (Oct. 1972); CPM-7210D0842
—Fluctuation Absorption of Sound near the Curie Points of Ferroelectrics That Become Piezoelectric in the Paraelectric Phase (T)—A. P. Levanyuk and N. V. Shchedrina. 14(10), 2581–4 (Apr. 1973); CPM-7304E1227
Levdik, V. A.—Influence of an External Field Thermal Hysteresis of the Magnetic Structure of Chromium (E)—V. S. Golovkin, V. N. Bykov and V. A. Levdik. 14(6), 1533–4(C) (Dec. 1972); CPM-7212D0869
Levin, V. M.—Amplification and Generation of "Oblique" Transverse Acoustic Waves in a Hexagonal Piezosemiconductor Plate (T)—L. A. Chernozatonskii and V. M. Levin. 14(7), 1783–7 (Jan. 1973); CPM-7301C0743
Levinson, I. B.—Bound Electron-Phonon States in a Magnetic Field (T)—B. I. Kaplan and I. B. Levinson. 14(5), 1212–20 (Nov. 1972); CPM-7211A1464
—Absorption of Light by Bound States of an Electron and a Phonon in Magnetic Fields (T)—B. I. Kaplan and I. B. Levinson. 14(6), 1434–40 (Dec. 1972); CPM-7212D0770
Levitin, R. Z.—Magnetic and Magnetoelastic Properties of $FeBO_3$ Single Crystals (E)—A. M. Kadomtseva, R. Z. Levitin, Yu. F. Popov, V. N. Seleznev and V. V. Uskov. 14(1), 172–4 (Jul. 1972); CPM-7207D1131
—Method for Separating Different Components of the Ferrimagnetic Anisotropy (T)—R. Z. Levitin and A. S. Pakhomov. 14(5), 1276–9 (Nov. 1972); CPM-7211A1528
Levitskaya, T. D.—Temperature Dependence of the Absorption of Ultrasound in $LiIO_3$ Crystals (E)—A. A. Abramovich, V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov and P. L. Mitnitskii. 14 (9), 2237–42 (Mar. 1973); CPM-7303E1061
—Optical Detection in Lithium Iodate Crystals (E)—P. N. Zanadvorov, V. M. Moldavskaya and T. D. Levitskaya. 14(9), 2424–5(C) (Mar. 1973); CPM-7303E1248
Liberman, A. B.—Magnetic Sublattices in Nonstoichiometric Manganese-Zinc Ferrites (E)—Sh. Sh. Bashkirov, A. B. Liberman and V. I. Sinyavskii. 14(11), 2776–8 (May 1973); CPM-7305D1004
Ligenza, S.—Mössbauer and Neutron-Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879
Likhachev, V. A.—Influence of the Deformation Method on the Nature of Dislocation Loops in Aluminum (E)—M. M. Myshlyaev, S. S. Olevskii, S. K. Maksimov and V. A. Likhachev. 14(3), 785–6(C) (Sep. 1972); CPM-7209D0219
Likharev, K. K.—Properties of Superconducting Point Contacts (E)—V. N. Gubankov, K. K. Likharev and N. M. Margolin. 14(4), 819–25 (Oct. 1972); CPM-7210D0634
—Nonlinear Microwave Properties of Narrow Superconducting Films (E)—V. N. Gubankov, K. K. Likharev and N. B. Pavlov. 14(11), 2721–5 (May 1973); CPM-7305D0949
Lisitsa, M. P.—Possibility of Fermi Resonance between a Local Impurity Vibration and the Vibrations of the Host Lattice of a Crystal (E/T)—M. Ya Valakh, M. P. Lisitsa, N. E. Novoseletskii and A. M. Yaremko. 14(3), 702–5 (Sep. 1972); CPM-7209D0136
—Some Features of Exciton Effects in Layer Crystals (T/E)—M. P. Lisitsa, A. M. Yaremko, G. G. Tarasov, M. Ya. Valakh and L. I. Berezhinskii. 14(11), 2744–7 (May 1973); CPM-7305D0972
Lisovskii, F. V.—Raman-Nath Scattering of Light by Magnetostatic Waves (E)—N. N. Kiryukhin, I. N. Kotel'nikov and F. V. Lisovskii. 14(12), 3087–8(C) (Jun. 1973); CPM-7306D0929
Lisovskii, Yu. A.—Analysis of Thermal Expansion of Transition Metals in the Quasiharmonic Approximation (T/E)—Yu. A. Lisovskii. 14(8), 2015–8 (Feb. 1973); CPM-7302E1141
—Relationship between Elastic Moduli at Finite Temperatures (T)—Yu. Kh. Vekilov, O. M. Krasil'nikov and Yu. A. Lisovskii. 14(10), 2634–5(C) (Apr. 1973); CPM-7304E1280
Lisovskii, Yu. L.—Diffusion of Electrons in a Constant Electric Field with an Exponentially Varying Mobility and Lifetime (T)—V. M. Evdokimov and Yu. L. Lisovskii. 14(8), 2089–92 (Feb. 1973); CPM-7302E1215
Lobachev, A. N.—New Ferroelectric : Antimony Orthoniobate (T)—A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14(2), 509–10(C) (Aug. 1972); CPM-7208E0666
Logachev, Yu. A.—Noncentral Interaction in Crystals and Molecules According to the Valence-Bond Model (T)—L. M. Terent'eva, Yu. A. Logachev and B. Ya. Moizhes. 14(10), 2543–9 (Apr. 1973); CPM-7304E1189
—Phonon-Phonon Scattering and High-Temperature Lattice Thermal Conductivity (T/E)—Yu. A. Logachev and M. S. Yur'ev. 14(11), 2826–31 (May 1973); CPM-7305D1054
Lomasov, Yu. N.—Energy of Formation of Biexcitons in Silicon (E)—V. M. Asnin, Yu. N. Lomasov and A. A. Rogachev. 14(11), 2921–2(C) (May 1973); CPM-7305D1149
London, V. D.—Precipitation of Solid Solutions of Strontium and Cadmium in KCl Single Crystals (E)—V. G. Kononenko and V. D. London. 14(9), 2217–9 (Mar. 1973); CPM-7303E1041
Lordkipanidze, D. Sh.—Electroabsorption in CdTe (E/T)—R. M. Akopyan, Yu. N. Berozashvili, A. V. Dundua and D. Sh. Lordkipanidze. 14(3), 801–2(C) (Sep. 1972); CPM-7209D0235
—Influence of Uniaxial Compression on the Anisotropy of the Electroabsorption of Light in GaAs (E)—Yu. N. Berozashvili, O. V. Gogolin and D. Sh. Lordkipanidze. 14(11), 2926–7(C) (May 1973); CPM-7305D1154
Los', V. F.—Theory of Damping of Local Vibrations in Semiconductors (T)—V. F. Los'. 14(12), 3048–50 (Jun. 1973); CPM-7306D0890

Loshkareva, N. N.—Reflection of $Eu_{1-x}Gd_xO$ Single Crystals in the Visible and Infrared Spectra (E/T)—A. A. Samokhvalov, G. P. Skornyakov, N. N. Loshkareva, G. V. B. Birkle, M. I. Simonova and T. P. Chukina. 14(5), 1177–80 (Nov. 1972); CPM-7211A1429

Lugovskii, V. V.—Long-Wavelength Fundamental Absorption Edge of $CdSiP_2$ Crystals (E)—I. S. Gorban', V. V. Lugovskii and V. P. Radzivil. 14(12), 3089–90(C) (Jun. 1973); CPM-7306D0931

Lukashevich, I. I.—Relaxation of Mössbauer Spectra of $DyVO_4$ (E)—V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Lukomskii, V. P.—Nonlinear Magnetoacoustic Resonance in Ferromagnets (T)—V. P. Lukomskii and Yu. A. Tsvirko. 14(5), 1228–32 (Nov. 1972); CPM-7211A1480

—Instability of the State of a Ferrodielectric Plate Against Buildup of Magnetoelastic Oscillations (T)—V. P. Lukomskii and B. N. Filippov. 14(10), 2585–7 (Apr. 1973); CPM-7304E1231

Luk'yanova, L. N.—Temperature Dependences of the Electron Effective Mass and Mobility in $Bi_2Te_{3-x}Se_x$ (E/T)—B. M. Gol'tsman, V. A. Kutasov and L. N. Luk'yanova. 14(4), 868–71 (Oct. 1972); CPM-7210D0683

Luk'yanovich, V. M.—Diffusion Mechanism of Nucleation of Gold on an Ionic Crystal (E)—V. I. Trofimov and V. M. Luk'yanovich. 14(1), 239–41(C) (Jul. 1972); CPM-7207D1198

Lur'e, B. G.—Investigation of the α–Al_2O_3–Fe_2O_3 System by the Mössbauer Effect (E)—A. V. Kalyamin, B. G. Lur'e, L. A. Marshak and A. N. Murin. 14(12), 3083–4(C) (Jun. 1973); CPM-7306D0925

Lushchik, Ch. B.—Electron–Microscope Detection and Optical Investigation of Exciton Decay Products in KBr Crystals (E/T)—Kh. R.-V. Iygi, Ch. B. Lushchik, A. F. Malysheva and É. S. Tiisler. 14(1), 95–100 (Jul. 1972); CPM-7207D1054

—Ionization of In^+ and Tl^+ Centers in KCl and KBr Crystals by Interstitial Halogen Atoms (E)—I. K. Vitol, V. Ya. Grabovskis, S. G. Zazubovich and Ch. B. Lushchik. 14(4), 894–8 (Oct. 1972); CPM-7210D0709

L'vov, V. S.—Transient Behavior of a System of Parametrically Excited Spin Waves (T)—V. E. Zakharov, V. S. L'vov and S. L. Musher. 14(3), 710–5 (Sep. 1972); CPM-7209D0144

—Parametric Excitation of Spin Waves in Ferromagnets with Magnetic Inhomogeneities (T)—V. E. Zakharov and V. S. L'vov. 14(10), 2513–9 (Apr. 1973); CPM-7304E1159

Lyagushchenko, R. I.—Distribution Function and Energy Losses of Hot Electrons Interacting with Optical Phonons (T)—B. L. Gel'mont, R. I. Lyagushchenko and I. N. Yassievich. 14(2), 445–52 (Aug. 1972); CPM-7208E0602

Lyapidevskii, V. K.—Determination of the Shapes of the Potential Wells of Traps Using the Frenkel Thermal–Field Effect (T)—N. G. Volkov and V. K. Lyapidevskii. 14(5), 1149–52 (Nov. 1972); CPM-7211A1401

Lyapukhov, V. E.—Spin–Lattice Relaxation of Energy of Dipole–Dipole Reservoir and Slow Motion in Crystalline Beryllium Oxyacetate (E/T)—V. E. Lyapukhov and O. P. Revokatov. 14(2), 502–3(C) (Aug. 1972); CPM-7208E0659

Lyashenko, N. I.—Intrinsic Emission from Yttrium Iron Garnet in the Presence of a Domain Structure (E)—N. I. Lyashenko, V. M. Talalaevskii and I. A. Mishina. 14(9), 2328–9 (Mar. 1973); CPM-7303E1152

Lykina, M. M.—Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

Lysenko, M. G.—Theory of the Propagation of Spin Waves in Ferrites in an Inhomogeneous Static Magnetic Field (T)—I. A. Deryugin and M. G. Lysenko. 14(5), 1117–21 (Nov. 1972); CPM-7211A1369

Lyubimov, V. N.—Surface Electromagnetic Waves in a Uniaxial Crystal (T)—V. N. Lyubimov and D. G. Sannikov. 14(3), 575–9 (Sep. 1972); CPM-7209D0009

Lyubov, S. K.—Secondary Electron Emission from Radioactive Precipitates (E)—B. V. Bobykin, S. K. Lyubov and Yu. A. Nevinnyi. 14(11), 2912–3(C) (May 1973); CPM-7305D1140

Lyubutin, I. S.—Induced Magnetic Fields at Diamagnetic Atoms in an Antiferromagnet (E)—I. S. Lyubutin and A. P. Dodokin. 14(9), 2368–9(C) (Mar. 1973); CPM-7303E1192

—Angular Spin Configurations in $MnCrFeO_4$ (E)—I. S. Lyubutin, T. V. Dmitrieva and L. M. Belyaev. 14(10), 2579–80 (Apr. 1973); CPM-7304E1225

M

Maev, R. G.—Method of Changing and Controlling Optical Properties of Photosemiconductors (T)—R. G. Maev, I. A. Polufiktov and V. I. Pustovoit. 14(7), 1738–44 (Jan. 1973); CPM-7301C0698

Magdiev, A. M.—Internal Friction in Pure Tellurium Single Crystals (E)—G. B. Bagduev, A. M. Magdiev, E. K. Naimi and N. A. Tyapunina. 14(10), 2650–1(C) (Apr. 1973); CPM-7304E1296

Maier, A. A.—Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

Makara, V. A.—Influence of Placing Dislocations at Starting Positions on the Kinetics of Dislocation Motion in NaCl Crystals (E)—V. A. Makara, N. N. Novikov and O. V. Rudenko. 14(1), 261–3(C) (Jul. 1972); CPM-7207D1220

Makarov, V. I.—Effect of Singularities in the Density of Electron States on the Thermodynamics of a Normal Metal (T)—V. G. Bar'yakhtar, V. V. Gann and V. I. Makarov. 14(6), 1477–80 (Dec. 1972); CPM-7212D0813

Makrushin, N. I.—Low-Energy Electron Diffraction from a (111) Germanium Surface During the Early Stages of Oxygen Adsorption (E)—B. Z. Ol'shanetskii, N. I. Makrushin and A. I. Volokitin. 14(11), 2713–6 (May 1973); CPM-7305D0941

Maksimenko, V. M.—Temperature Variation of EPR Line Splitting of Cr^{3+} in $ZnWO_4$ by an External Electric Field (E/T)—A. A. Bugai, O. G. Duliu, V. M. Maksimenko and Yu. B. Shevchenko. 14(2), 475–6(C) (Aug. 1972); CPM-7208E0632

—Defect Distribution near a Paramagnetic Center (T/E)—M. G. Blazha, A. A. Bugai, V. M. Maksimenko and A. B. Roitsin. 14(7), 1779–82 (Jan. 1973); CPM-7301C0739

Maksimov, S. K.—Influence of the Deformation Method on the Nature of Dislocation Loops in Aluminum (E)—M. M. Myshlyaev, S. S. Olevskii, S. K. Maksimov and V. A. Likhachev. 14(3), 785–6(C) (Sep. 1972); CPM-7209D0219

Maksimov, Yu. L.—Recombination Radiation Involving Participation of Isoelectronic Centers in Antimony–Doped Gallium Phosphide (E)—D. S. Nedzvetskii, S. I. Radautsan and Yu. I. Maksimov. 14(2), 551–3(C) (Aug. 1972); CPM-7208E0708

Maksimov, Yu. V.—Study of the Magnetic Properties of χ and θ Iron Carbide Using Mössbauer Spectroscopy (E)—Yu. V. Maksimov, I. P. Suzdalev and R. A. Arents. 14(11), 2832–4 (May 1973); CPM-7305D1060

Malakhovskii, A. V.—Magnetooptical Resonance in Manganese Ferrite in the Visible Spectral Region (E)—A. V. Malakhovskii, I. S. Édel'man and G. G. Vasil'ev. 14(3), 681–3 (Sep. 1972); CPM-7209D0115

—Permittivity Tensor of Manganese Ferrite in the Visible Range of Wavelengths (T/E)—A. V. Malakhovskii, I. S. Édel'man and O. A. Rybinskii. 14(6), 1462–6 (Dec. 1972); CPM-7212D0798

—Optical Properties of $FeBO_3$ in the Strong Absorption Region (E)—I. S. Édel'man, A. V. Malakhovskii, T. I. Vasil'eva and V. N. Seleznev. 14(9), 2442–4(C) (Mar. 1973); CPM-7303E1266

—Anomalous Change of Polar Kerr Effect in Nickel and Iron in a Strong Magnetic Field (E/T)—I. S. Edel'man, A. V. Malakhovskii, T. P. Morozova, A. T. Slivinskaya and G. S. Veisig. 14(11), 2770–2 (May 1973); CPM-7305D0998

Maleev, S. V.—Relaxation of the Fluctuations of Magnetization in Ferromagnets above the Curie Point (T)—G. A. Vugal'ter and S. V. Maleev. 14(11), 2764–6 (May 1973); CPM-7305D0992

Malik, G. N.—Effect of Ultrasonic Vibrations on a Crystal's Resistance to Plastic Deformation (E)—I. A. Gindin, I. M. Neklyudov, G. N. Malik and O. T. Rozumnyi. 14(5), 1126–30 (Nov. 1972); CPM-7211A1378

—Decreased Dislocation Density in Crystals Due to the Effect of Ultrasonic Vibrations (E)—I. A. Gindin, O. I. Bolchok, G. N. Malik and I. M. Neklyudov. 14(7), 1828–9(C) (Jan. 1973); CPM-7301C0788

Malinenko, I. A.—Diffuse Scattering of X Rays by Polycrystalline Aggregates Containing Dislocation Loops of Small Radius (T)—I. A. Malinenko and O. N. Shivrin. 14(10), 2599–600 (Apr. 1973); CPM-7304E1245

Malkin, B. Z.—Spin–Phonon Interaction in Doped Fluorite-Type Crystals (T)—Z. I. Ivanenko and B. Z. Malkin. 14(1), 122–4 (Jul. 1972); CPM-7207D1081

Malkovich, R. Sh.—Influence of the Adsorption of Impurities on the Shape of a Diffusion Curve (E)—R. Sh. Malkovich, V. A. Mashina and I. V. Nistiryuk. 14(12), 3079–80(C) (Jun. 1973); CPM-7306D0921

Malov, A. D.—Photoconductivity of Semiconductors in Strong Magnetic Fields (T)—A. D. Malov and V. I. Ryzhii. 14(7), 1766–9 (Jan. 1973); CPM-7301C0726

Mal'shukov, A. G.—Surface Excitons in an Insulator Bounded by a Metal (T)—V. M. Agranovich, A. G. Mal'shukov and M. A. Mekhtiev. 14(3), 725–31 (Sep. 1972); CPM-7209D0159

Mal'tsev, V. D.—Inelastic Phenomena in Sodium Chloride Whiskers (E)—L. B. Zuev, V. D. Mal'tsev, L. M. Vysoven' and V. A. Stupin. 14(4), 1096–7(C) (Oct. 1972); CPM-7210D0911

Mal'tseva, V. A.—Effect of Mechanical Stress on the Shapes of Dislocation Etch Pits in Silicon (E)—V. A. Mal'tseva, B. D. Platonov, S. Yu. Sofronova and Ya. M. Bekker. 14(4), 1053–4(C) (Oct. 1972); CPM-7210D0868

Malysheva, A. F.—Electron–Microscope Detection and Optical Investigation of Exciton Decay Products in KBr Crystals (E/T)—Kh. R.-V. Iygi, Ch. B. Lushchik, A. F. Malysheva and É. S. Tiisler. 14(1), 95–100 (Jul. 1972); CPM-7207D1054

Malyushitskaya, Z. V.—Retaining the Metastable High–Pressure Phases of CdS, Mg_2Sn, SnTe, and SnTe–GeTe Alloys (E)—Z. V. Malyushitskaya, S. S. Kabalkina and L. F. Vereshchagin. 14(4), 1040–5 (Oct. 1972); CPM-7210D0855

Mamadaliev, M.—Mechanism of Migration and the Hall Effect in Liquid Semiconductors (E/T)—A. A. Andreev, M. Mamadaliev and A. R. Regel'. 14(8), 2060–5 (Feb. 1973); CPM-7302E1186

Mamalui, Yu. A.—Magnetic Structure and Temperature Dependences of Resonance Fields of Indium–Substituted M–Type Ferrites (E)—Yu. A. Mamalui, A. A. Murakhovskii and A. A. Taran. 14(7), 1703–6 (Jan. 1973); CPM-7301C0663

Mamedov, A. M.—Pleochroism in SbSI Associated with the Domain Structure (E)—A. Kh. Zeinally, A. M. Mamedov and Sh. M. Éfendiev. 14(8), 2106–7(C) (Feb. 1973); CPM-7302E1232

Mamedov, T. A.—Anisotropic Linear Expansion and the Isothermal Compressibility of a GaSe Single Crystal (E)—N. G. Aliev, I. G. Kerimov, M. M. Kurbanov and T. A. Mamedov. 14(5), 1304–5(C) (Nov. 1972); CPM-7211A1556

Man'kov, Yu. I.—Influence of Domain Boundaries on the Conductivity of Ferromagnets (T)—Yu. I. Man'kov. 14(1), 62–4 (Jul. 1972); CPM-7207D1021

Manokhin, S. P.—Transient Effects Associated with Field Emission of Electrons from Silicon (E)—G. N. Fursei, N. V. Egorov and S. P. Manokhin. 14(6), 1453–6 (Dec. 1972); CPM-7212D0789

Manuilova, A. A.—Broadening of a Ferromagnetic Resonance Line by Chemical Magnetic Inhomogeneities (E)—A. A. Manuilova, V. E. Zuev, S. P. Stanishevskaya and V. Ya. Dubossarskaya. 14(9), 2365–6(C) (Mar. 1973); CPM-7303E1189

Manukyan, A. L.—Frequency Dispersion of the Electrical Conductivity of Liquid Selenium and Selenium–Tellurium Alloys (E)—A. A. Andreev, A. L. Manukyan, A. B. Pevtsov and L. N. Shumilova. 14(12), 3100–1(C) (Jun. 1973); CPM-7306D0942

Manykin, É. A.—Magnetic Structure of Small Weakly Nonspherical Ferromagnetic Particles (T)—A. M. Afanas'ev, É. A. Manykin and É. V. Onishchenko. 14(9), 2175–80 (Mar. 1973); CPM-7303E0999

Marazuev, Yu. A.—Impurity Absorption Spectra of Silicon Carbide in the Near Infrared Region (E)—L. S. Gorban', Yu. A. Marazuev and A. S. Skirda. 14(3), 664–7 (Sep. 1972); CPM-7209D0098

Marchenko, V. A.—Nature of Solid Solutions Based of Superconducting V_3Si (E)—Ch. V. Kopetskii, B. N. Kodess and V. A. Marchenko. 14(6), 1556–7(C) (Dec. 1972); CPM-7212D0892

Margolin, N. M.—Properties of Superconducting Point Contacts (E)—V. N. Gubankov, K. K. Likharev and N. M. Margolin. 14(4), 819–25 (Oct. 1972); CPM-7210D0634

Marikyan, A. O.—Temperature Dependences of the Widths of the FMR and ESR Lines and of the g Factor of Yttrium Iron Garnet (E)—S. A. Mnatsakanyan and A. O. Marikyan. 14(6), 1575–6(C) (Dec. 1972); CPM-7212D0911

Mar'in, V. P.—Characteristics of the Alpha–Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148

Marinova, Ts. S.—Determination of the Kinetic Characteristics of the Desorption of Lanthanum and Neodymium Atoms and Ions from the (001) Face of Tungsten by the Temperature Modulation Method (E/T)—N. I. Ionov, Ts. S. Marinova and B. V. Yakshinskii. 14(11), 2717–20 (May 1973); CPM-7305D0945

Markin, A. I.—Longitudinal Magnetoresistance of n–Si in Strong Magnetic Fields (E/T)—M. V. Glushkov and A. I. Markin. 14(12), 2967–70 (Jun. 1973); CPM-7306D0809

Markov, Yu. F.—Effect of Crystal Lattice Disorder on the Vibrational Spectrum and the Optical States of $CdGeP_2$ (E)—Yu. F. Markov and N. B. Reshetnyak. 14(1), 37–40 (Jul. 1972); CPM-7207D0996

—Combination Scattering Spectra of Crystalline and Vitreous As_2S_3 (E)—Yu. F. Markov and N. B. Reshetnyak. 14(4), 1063–5(C) (Oct. 1972); CPM-7210D0878

Markova-Osorgina, I. A.—Deformation Luminescence of KCl.Ag Crystals (E)—I. A. Markova–Osorgina, F. D. Senchukov and S. Z. Shmurak. 14(5), 1236–8 (Nov. 1972); CPM-7211A1488

Marshak, L. A.—Investigation of the α–Al_2O_3–Fe_2O_3 System by the Mössbauer Effect (E)—A. V. Kalyamin, B. G. Lur'e, L. A. Marshak and A. N. Murin. 14(12), 3083–4(C) (Jun. 1973); CPM-7306D0925

Martynovich, E. F.—Recombination and Capture Probabilities in Potassium Iodide–Thallium Crystals (E)—E. F. Martynovich, I. A. Parfianovich and Yu. B. Nemirovskii. 14(4), 1061–2(C) (Oct. 1972); CPM-7210D0876

Martynyuk, M. M.—Overheating of the Hexagonal Modification of Zirconium Above the Polymorphic Transition Temperature under Pulse Heating Conditions (E)—M. M. Martynyuk and V. I. Tsapkov. 14(6), 1558–9(C) (Dec. 1972); CPM-7212D0894

Masharov, S. I.—Kinetic Properties and Electron Scattering Mechanisms of Ti, Zr, and Hf at High Temperatures (T/E)—V. E. Zinov'ev, S. I. Masharov, L. I. Chupina and P. V. Gel'd. 14(4), 902–5 (Oct. 1972); CPM-7210D0717

Mashina, V. A.—Influence of the Adsorption of Impurities on the Shape of a Diffusion Curve (E)—R. Sh. Malkovich, V. A. Mashina and I. V. Nistiryuk. 14(12), 3079–80(C) (Jun. 1973); CPM-7306D0921

Mashkevich, V. S.—Spectral Theory of the Transfer of Excitations in a System of Two–Level Centers (T)—V. S. Mashkevich and E. A. Shadchin. 14(3), 716–9 (Sep. 1972); CPM-7209D0150

—Light Absorption by Free Carriers Due to Interactions between Them (T)—G. K. Vlasov, V. S. Mashkevich and E. A. Timonina. 14(11), 2870–4 (May 1973); CPM-7305D1098

Matulis, A. Yu.—Threshold Singularity in the Spectrum of Electrons Coupled to Optical Phonons by the Polarization Interaction (T)—A. Yu. Matulis. 14(10), 2564–6 (Apr. 1973); CPM-7304E1210

Matveev, V. M.—Non–Heisenberg Exchange Interaction and Effects Due to this Interaction (T)—V. M. Matveev and E. L. Nagaev. 14 (2), 408–15 (Aug. 1972); CPM-7208E0565

Matveev, Yu. E.—Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

Matyash, I. V.—Electron–Nuclear Double Resonance of the Triplet State of M Centers in KCl (E/T)—Yu. V. Fedotov, N. N. Bagmut and I. V. Matyash. 14(2), 519–20(C) (Aug. 1972); CPM-7208E0676

Matyashevskii, V. V.—Photoemission Studies of Oxyhalide Crystals of Bismuth (E)—V. M. Bentsa, M. V. Shtilikha, D. V. Chepur, Yu. Yu. Kampi and V. V. Matyashevskii. 14(3), 671–3 (Sep. 1972); CPM-7209D0105

Mavrin, B. N.—Transverse Polaritons in an $LiNbO_3$ Crystal (E)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(6), 1562–3(C) (Dec. 1972); CPM-7212D0898

—Polaritons in a Biaxial Crystal of $Ba_2NaNb_5O_{15}$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2402–3(C) (Mar. 1973); CPM-7303E1226

—Fermi Resonance of a Polariton with a Biphonon in a Crystal of $LiNbO_3$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2432–3(C) (Mar. 1973); CPM-7303E1256

—Upper Branch of Ordinary Polaritons in an $LiNbO_3$ Crystal (E/T)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(10), 2611 (C) (Apr. 1973); CPM-7304E1257

Mednis, P. M.—Joint Matrix Element for Two–Photon Interband Transitions in Semiconductors (T)—P. M. Mednis. 14(9), 2195–7 (Mar. 1973); CPM-7303E1019

Medved', A. V.—Acoustoelectric Effect in a Piezoelectric–Semiconductor Layered Structure (E)—A. M. Kmita and A. V. Medved'. 14(9), 2285–93 (Mar. 1973); CPM-7303E1109

Melkhyar, P. V.—Photo-EMF Spectrum of a Silver Bromide Emulsion Film (E)—N. N. Korotaev and P. V. Meiklyar. 14(10), 2656–7(C) (Apr. 1973); CPM-7304E1302

Meil'man, M. L.—Interpretation of the ESR Spectrum of Gd^{3+} Ions in a Trigonal Crystal Field (T)—M. L. Meil'man. 14(10), 2612–3 (C) (Apr. 1973); CPM-7304E1258

Meisner, L. B.—Nonlinear Optical Properties of $BaTiO_3$, $LiNbO_3$, and $LiIO_3$ Crystals in a Model of Polarizable Ions (T)—L. B. Meisner. 14(8), 1922–5 (Feb. 1973); CPM-7302E1048

Meizer, K. L.—Anisotropy of the Thermal Conductivity and Thermal Diffusivity in Iron Digermanide (E)—R. P. Krentsis, K. I. Meizer and P. V. Gel'd. 14(10), 2601–2 (Apr. 1973); CPM-7304E1247

Mekhtiev, M. A.—Surface Excitons in an Insulator Bounded by a Metal (T)—V. M. Agranovich, A. G. Mal'shukov and M. A. Mekhtiev. 14(3), 725–31 (Sep. 1972); CPM-7209D0159

Melekh, B. T.—Switching Effect in Molten Oxides Sb_2O_3 and B_2O_3 (E)—A. A. Andreev, S. D. Zainutdinov, B. T. Melekh, T. Turgunov and E. A. Shmuratov. 14(12), 3102–3(C) (Jun. 1973); CPM-7306D0944

Melekhin, V. P.—Acoustic Emission in a Thermoelastic Martensite Reaction (E)—R. I. Mints, V. P. Melekhin, I. Yu. Ievlev and V. V. Bukhalenkov. 14(5), 1368–9(C) (Nov. 1972); CPM-7211A1620

—Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Melent'ev, S. B.—Magnetoresistance of Island Films of Metals on Insulators (E)—B. T. Boiko, L. S. Palatnik, V. P. Kopach and S. B. Melent'ev. 14(4), 1090–1(C) (Oct. 1972); CPM-7210D0905

Melikov, K. A.—Damping of Oscillations at the Interface Between the Solid and Liquid Phases of Bismuth by a Magnetic Field (E)—G. V. Komarov, K. A. Melikov, M. D. Petropavlovskii and A. R. Regel'. 14(2), 485–6(C) (Aug. 1972); CPM-7208E0642

Melkov, G. A.—Three–Magnon Splitting in Ferrites (E)—G. A. Melkov and V. L. Grankin. 14(11), 2916(C) (May 1973); CPM-7305D1144

Mel'nikov, E. V.—Relaxation of Mössbauer Spectra of $DyVO_4$ (E)—V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Mel'nikov, N. I.—Mechanism of Radiation–Induced Coloring of KCl:Ag Crystals (E/T)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(3), 753–6 (Sep. 1972); CPM-7209D0187

—Investigation of Silver Atoms in Mixed Alkali Halide Crystals (E)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(6), 1488–92 (Dec. 1972); CPM-7212D0824

—Off–Center Position of Mn^+ Ions in KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov, N. I. Mel'nikov and N. G. Romanov. 14(7), 1842–3(C) (Jan. 1973); CPM-7301C0802

—Acentric Position of Silver Anions in a KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov and N. I. Mel'nikov. 14(7), 1876–8(C) (Jan. 1973); CPM-7301C0836

Men', A. N.—Degeneracy of Spin States in Complexes of Paramagnetic Ions (T)—B. A. Men', A. N. Men' and V. I. Cherepanov. 14(12), 2931–5 (Jun. 1973); CPM-7306D0773

Men', B. A.—Degeneracy of Spin States in Complexes of Paramagnetic Ions (T)—B. A. Men', A. N. Men' and V. I. Cherepanov. 14(12), 2931–5 (Jun. 1973); CPM-7306D0773

Mentser, A. N.—Elastic Constants of ZnSe (E)—V. I. Kuskov, A. P. Rusakov and A. N. Mentser. 14(7), 1869–70(C) (Jan. 1973); CPM-7301C0829

Merkulov, L. G.—Calculation of Phonon Absorption of Ultrasonic Waves in Alkali Halide Crystals (T/E)—P. V. Kovalenok and L. G. Merkulov. 14(2), 283–6 (Aug. 1972); CPM-7208E0440

Merzhanov, A. G.—Superconductivity of Films of Nitrides of Several Metals and Alloys Prepared by the Electrothermal Method (E)—Yu. M. Grigor'ev, V. F. Degtyareva, A. G. Merzhanov and A. G. Rabin'kin. 14(10), 2626–7(C) (Apr. 1973); CPM-7304E1272

Mezrin, O. A.—Magnetic Nonlinearity of the Dependence of Current on Electric Field Caused by the Intrinsic Field (T/E)—L. E. Gurevich and O. A. Mezrin. 14(11), 2704–5 (May 1973); CPM-7305D0932

Mezrina, L. F.—Theory of Optomagnetic Waves in Semiconductors and Semimetals (T)—I. V. Ioffe and L. F. Mezrina. 14(6), 1527–8 (C) (Dec. 1972); CPM-7212D0863

—Optical Excitation of Plane–Polarized Waves and Structures (T)—I. V. Ioffe and L. F. Mezrina. 14(10), 2619(C) (Apr. 1973); CPM-7304E1265

Migolinets, F. M.—Influence of the Nonequilibrium Carrier Density on the Formation of Phase Boundaries in $SbSI_xBr_{1-x}$ Single Crystals (E)—I. I. Groshik, I. D. Turyanitsa and F. M. Migolinets. 14(10), 2614–5(C) (Apr. 1973); CPM-7304E1260

Mikhailov, A. I.—Diffusion Processes in Irradiated Molecular Crystals (E/T)—A. I. Mikhailov, A. I. Bol'shakov, Ya. S. Lebedev and V. I. Gol'danskii. 14(4), 1000–6 (Oct. 1972); CPM-7210D0815

Mikhailov, A. S.—Selective Transparency of Ferromagnetic Metal Plates near Antiresonance (T)—M. I. Kaganov and A. S. Mikhailov. 14(11), 2748–50 (May 1973); CPM-7305D0976

Mikhailov, B. M.—Instability of Domains in Nonlinear Ferromagnetic Resonance (E)—N. N. Kiryukhin, B. M. Mikhailov, Ya. A. Monosov and P. I. Nabokin. 14(6), 1573–4(C) (Dec. 1972); CPM-7212D0909

Mikhailovskii, I. M.—Dislocation Structure of Large–Angle Metal Grain Boundaries and Metal Recrystallization (T)—I. M. Mikhailovskii. 14(10), 2475–9 (Apr. 1973); CPM-7304E1121

—Formation of Large–Angle Grain Boundaries Under the Influence of Mechanical Stresses (E)—Zh. I. Dranova and I. M. Mikhailovskii. 14(12), 3104–5(C) (Jun. 1973); CPM-7306D0946

Mikhailovskii, V. M.—Thermally Activated Motion of Twinning Boundaries in Calcite (E)—R. I. Garber, V. M. Mikhailovskii and E. I. Stepina. 14(3), 773–4(C) (Sep. 1972); CPM-7209D0207

—Determination of the Starting Stresses of Dislocations from Etch Figure Rosettes (T)—R. I. Garber and V. M. Mikhailovskii. 14(5), 1342–3(C) (Nov. 1972); CPM-7211A1594

Mikhal'chenko, V. P.—Temperature Dependence of the Components of the Thermal Expansion Tensor α_{ik} of Gallium (E)—E. I. Geshko, V. P. Mikhal'chenko and B. M. Sharlai. 14(6), 1554–5(C) (Dec. 1972); CPM-7212D0890

Mikhel'son, A. V.—Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

—Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

Mikhlin, É. Ya.—Focusing Influence of Vacancies on the Propagation of Atomic Collision Chains. Elongation of Chains (T)—É. Ya. Mikhlin and V. V. Nelaev. 14(7), 1866–8(C) (Jan. 1973); CPM-7301C0826

Mikho, V. V.—Influence of an Electric Field on the Parameters of Impurity Centers in Al_2O_3 (E)—V. V. Mikho, A. P. Fedchuk and L. M. Stambol'skaya. 14(10), 2665–6(C) (Apr. 1973); CPM-7304E1311

Mikulinskii, M. A.—Effect of Domain Structure on the Behavior of Thermodynamic Parameters near a Critical Point (T)—V. S. Esipov, V. M. Zaprudskii and M. A. Mikulinskii. 14(1), 9–13 (Jul. 1972); CPM-7207D0968

Mileshkina, N. V.—Connection Between Electrical Breakdown and the Form of the Volt—Ampere Characteristics of the Autoemission Current From p–Ge (E)—P. G. Shlyakhtenko, R. Z. Bakhtizin and N. V. Mileshkina. 14(5), 1320–2(C) (Nov. 1972); CPM-7211A1572

Mil'ner, G. A.—Specific Heat Anomaly near an Orientational Phase Transition in Ammonium Bromide (E)—É. N. Kostina and G. A. Mil'ner. 14(11), 2923–5(C) (May 1973); CPM-7305D1151

Miloshenko, V. E.—Internal Friction and Relative Value of Young's Modulus of Niobium in Normal and Superconducting States (E)—V. S. Postnikov, I. V. Zolotukhin and V. E. Miloshenko. 14(3), 809–10(C) (Sep. 1972); CPM-7209D0243

—Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

Miloslavskii, V. K.—Faraday Effect in the Intrinsic Absorption Edge in CdSe (E)—V. V. Mussil, V. V. Karmazin and V. K. Miloslavskii. 14(12), 3004–7 (Jun. 1973); CPM-7306D0846

Milov, A. D.—Spin–Lattice Relaxation of Hydrogen Atoms and Paramagnetic Ions in Sulfuric Acid Vitreous Aqueous Solutions at 77°K (E/T)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1915–8 (Feb. 1973); CPM-7302E1041

—Spin Diffusion and Spin–Lattice Relaxation Kinetics of Hydrogen Atoms in Glassy Matrices at 77°K (T/E)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1956–60 (Feb. 1973); CPM-7302E1082

Mil'vidskii, M. G.—Effect of the Type and Concentration of Structural Point Defects on the Electrophysical Properties of Undoped Gallium Arsenide (E/T)—E. V. Solov'eva, V. V. Karataev, M. G. Mil'vidskii, V. B. Osvenskii and O. G. Stolyarov. 14(2), 441–4 (Aug. 1972); CPM-7208E0598

—Precipitation of Copper in GaAs Single Crystals (E)—L. M. Morgulis, M. G. Mil'vidskii, V. B. Osvenskii and T. G. Yugova. 14 (9), 2436–8(C) (Mar. 1973); CPM-7303E1260

Mineev, V. I.—Channeling Effects in the Scattering of 50–keV Electrons in Thin Copper Crystals (E)—Yu. S. Korobochko, E. L. Berezovskii, B. D. Grachev, S. S. Kozlovskii and V. I. Mineev. 14 (11), 2812–4 (May 1973); CPM-7305D1040

Mints, R. G.—Absorption of Rayleigh Acoustic Waves in Metals in Magnetic Fields (T)—R. G. Mints and G. A. Sorokin. 14(12), 3032–6 (Jun. 1973); CPM-7306D0874

Mints, R. I.—Acoustic Emission in a Thermoelastic Martensite Reaction (E)—R. I. Mints, V. P. Melekhin, I. Yu. Ievlev and V. V. Bukhalenkov. 14(5), 1368–9(C) (Nov. 1972); CPM-7211A1620

—Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Mirlin, D. N.—Surface Optical Vibrations in Ionic Crystal Plates (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(2), 453–9 (Aug. 1972); CPM-7208E0610

—Mixed Plasmon–Phonon Surface Modes in n–InSb (E/T)—I. I. Reshina, Yu. M. Gerbshtein and D. N. Mirlin. 14(4), 1104–5(C) (Oct. 1972); CPM-7210D0919

—Surface Optical Vibrations in a Thin Film (E/T)—V. V. Bryksin, Yu. M. Gerbshtein and D. N. Mirlin. 14(11), 2849–52 (May 1973); CPM-7305D1077

Mironov, S. A.—Excitation of Magnetoelastic Waves in a Magnesium Spinel Single Crystal (E)—S. A. Mironov, L. Smoczynski, E. V. Rubal'skaya and Yu. M. Yakovlev. 14(6), 1612–4(C) (Dec. 1972); CPM-7212D0948

Miryasov, N. Z.—Temperature Dependence of Extraordinary Hall Constant of Cu—Ni Ferrites (E)—Akhmed Abdel'gani and N. Z. Miryasov. 14(7), 1745–7 (Jan. 1973); CPM-7301C0705

Mishin, A. G.—Effect of a Strong Electric Field on the Interaction of Electrons with High–Frequency Ultrasound (T)—P. E. Zil'berman and A. G. Mishin. 14(3), 771–2(C) (Sep. 1972); CPM-7209D0205

Mishina, I. A.—Intrinsic Emission from Yttrium Iron Garnet in the Presence of a Domain Structure (E)—N. I. Lyashenko, V. M. Talalaevskii and I. A. Mishina. 14(9), 2328–9 (Mar. 1973); CPM-7303E1152

Mitnitskii, P. L.—Temperature Dependence of the Absorption of Ultrasound in $LiIO_3$ Crystals (E)—A. A. Abramovich, V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov and P. L. Mitnitskii. 14 (9), 2237–42 (Mar. 1973); CPM-7303E1061

Mitrofanov, V. V.—Emission of Activated Hydrogen and Hydrogen Peroxide from Freshly Treated Surfaces of Solids (E)—V. V. Mitrofanov, S. A. Smirnov and V. A. Fogel'. 14(3), 781–2(C) (Sep. 1972); CPM-7209D0215

Mitsen, K. V.—Thermoreflection in Polyvalent Metals in the Bragg Band–Band Transition Range (E)—A. I. Golovashkin, K. V. Mitsen and G. P. Motulevich. 14(6), 1467–72 (Dec. 1972); CPM-7212D0803

Mityagin, A. Yu.—Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583

—Surface Electric Field Arising from Three–Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Mnatsakanyan, S. A.—Temperature Dependences of the Widths of the FMR and ESR Lines and of the g Factor of Yttrium Iron Garnet (E)—S. A. Mnatsakanyan and A. O. Marikyan. 14(6), 1575–6(C) (Dec. 1972); CPM-7212D0911

Mogilevskii, B. M.—Conditions Governing Bipolar Thermodiffusion in Semiconducting Liquids (T/E)—B. M. Mogilevskii, V. N. Sokolov and A. F. Chudnovskii. 14(10), 2531–4 (Apr. 1973); CPM-7304E1177

—Thermal Conductivity of Molten Tellurium–Selenium Alloys (E)—B. M. Mogilevskii, V. N. Sokolov and A. F. Chudnovskii. 14(10), 2658–60(C) (Apr. 1973); CPM-7304E1304

Moizhes, B. Ya.—Noncentral Interaction in Crystals and Molecules According to the Valence–Bond Model (T)—L. M. Terent'eva, Yu. A. Logachev and B. Ya. Moizhes. 14(10), 2543–9 (Apr. 1973); CPM-7304E1189

Mokerov, V. G.—Electrooptic Effect in Vanadium Pentoxide Single Crystals below the Fundamental Absorption Edge (E/T)—V. G. Mokerov and B. L. Sigalov. 14(11), 2875–9 (May 1973); CPM-7305D1103

Mokhir, A. P.—Raman Scattering of Light in Antiferromagnetic Siderite (E)—Yu. A. Popkov, V. V. Eremenko, V. I. Fomin and A. P. Mokhir. 14(8), 1985–9 (Feb. 1973); CPM-7302E1111

Mokhov, E. N.—Structural Imperfections of Diffusion–Doped SiC(6H) Layers (E)—A. S. Tregubova, E. N. Mokhov and I. L. Shul'pina. 14(12), 3061–3 (Jun. 1973); CPM-7306D0903

Mokrushin, A. D.—Influence of Illumination on the Lifetime of Positrons in Silver Halide Crystals (E)—I. I. Bardyshev, V. I. Gol'danskii and A. D. Mokrushin. 14(3), 803–4(C) (Sep. 1972); CPM-7209D0237

—Adsorbed State of Positronium Atoms (E)—A. O. Tatur and A. D. Mokrushin. 14(10), 2617–8(C) (Apr. 1973); CPM-7304E1263

Moldavskaya, V. M.—Optical Detection in Lithium Iodate Crystals (E)—P. N. Zanadvorov, V. M. Moldavskaya and T. D. Levitskaya. 14(9), 2424–5(C) (Mar. 1973); CPM-7303E1248

Monosov, Ya. A.—Instability of Domains in Nonlinear Ferromagnetic Resonance (E)—N. N. Kiryukhin, B. M. Mikhailov, Ya. A. Monosov and P. I. Nabokin. 14(6), 1573–4(C) (Dec. 1972); CPM-7212D0909

Monozon, B. S.—Mott Exciton Spectrum in an Electric Field (T)—B. S. Monozon. 14(5), 1153–9 (Nov. 1972); CPM-7211A1405

Morachevskii, N. V.—Energy Balance and Dynamics of Damage of Transparent Dielectrics by Laser Radiation (E)—Yu. V. Arkhipov, N. V. Morachevskii, V. V. Morozov and F. S. Faizullov. 14(6), 1510–3 (Dec. 1972); CPM-7212D0846

Morgulis, L. M.—Precipitation of Copper in GaAs Single Crystals (E)—L. M. Morgulis, M. G. Mil'vidskii, V. B. Osvenskii and T. G. Yugova. 14(9), 2436–8(C) (Mar. 1973); CPM-7303E1260

Morozov, A. I.—Acoustoelectronic Effects in Piezoelectric Semiconductors at Large Acoustic Intensities (E/T)—V. V. Proklov, Yu. V. Gulyaev and A. I. Morozov. 14(4), 832–8 (Oct. 1972); CPM-7210D0647

Morozov, V. G.—Low–Temperature Anisotropy Constants of Antiferromagnets (T)—V. G. Morozov. 14(10), 2630–1(C) (Apr. 1973); CPM-7304E1276

Morozov, V. V.—Energy Balance and Dynamics of Damage of Transparent Dielectrics by Laser Radiation (E)—Yu. V. Arkhipov, N. V. Morachevskii, V. V. Morozov and F. S. Faizullov. 14(6), 1510–3 (Dec. 1972); CPM-7212D0846

Morozova, T. P.—Anomalous Change of Polar Kerr Effect in Nickel and Iron in a Strong Magnetic Field (E/T)—I. S. Edel'man, A. V. Malakhovskii, T. P. Morozova, A. T. Slivinskaya and G. S. Veisig. 14(11), 2770–2 (May 1973); CPM-7305D0998

Mosel', V. I.—Ferromagnetic Resonance in Gadolinium Aluminum Iron Garnets near the Compensation Points (E)—B. M. Lebed' and V. I. Mosel'. 14(11), 2781–3 (May 1973); CPM-7305D1009

Moskaleva, M. A.—Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskii, E. I. Balabanov and A. I. Vasil'ev. 14(12), 3028–31 (Jun. 1973); CPM-7306D0870

Moskvin, A. S.—Magnetic Interactions in Rare–Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2198–203 (Mar. 1973); CPM-7303E1022

—Parameters of the Crystal Field in Rare–Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2363–4(C) (Mar. 1973); CPM-7303E1187

Motulevich, G. P.—Thermoreflection in Polyvalent Metals in the Bragg Band–Band Transition Range (E)—A. I. Golovashkin, K. V. Mitsen and G. P. Motulevich. 14(6), 1467–72 (Dec. 1972); CPM-7212D0803

Movchan, Yu. N.—Influence of Mechanical Stresses on the Hydrolysis of Bonds on the Surface of Glass (E)—V. A. Bershtein, Yu. N. Movchan and V. V. Nikitin. 14(9), 2422–3(C) (Mar. 1973); CPM-7303E1246

Mozgin, V. V.—Changes in the Effect of Oxygen on the Thermionic–Emission Current of K^+ Ions (E)—L. P. Rekova, V. V. Mozgin, O. V. Kisel' and Ya. M. Fogel'. 14(8), 1961–5 (Feb. 1973); CPM-7302E1087

Mukhortov, Yu. P.—Transverse Acoustoelectric Effect (T/E)—Yu. P. Mukhortov, V. I. Pustovoit, I. S. Ravvin and L. A. Chernozatonskii. 14(9), 2300–4 (Mar. 1973); CPM-7303E1124

Murakhovskii, A. A.—Magnetic Structure and Temperature Dependences of Resonance Fields of Indium–Substituted M–Type Ferrites (E)—Yu. A. Mamalui, A. A. Murakhovskii and A. A. Taran. 14(7), 1703–6 (Jan. 1973); CPM-7301C0663

Muranova, G. A.—Spectroscopic Method for Determining the Sorption and Porosity Properties of Thin Solid Films (E)—A. P. Pervoev, G. A. Muranova and V. M. Zolotarev. 14(10), 2510–2 (Apr. 1973); CPM-7304E1156

Murashko, L. T.—Formation of Cavities During Breakdown of Ionic Crystals (E)—A. A. Vorob'ev and L. T. Murashko. 14(1), 207–8 (C) (Jul. 1972); CPM-7207D1166

Murav'eva, V. M.—Influence of Pressure on the Hall Effect in Dysprosium Single Crystals (E)—L. I. Vinokurova, E. I. Kondorskii, V. Yu. Ivanov, V. M. Murav'eva and Kh. Rakhimova. 14(12), 2981–4 (Jun. 1973); CPM-7306D0823

Murin, A. N.—Investigation of the α–Al_2O_3–Fe_2O_3 System by the Mössbauer Effect (E)—A. V. Kalyamin, B. G. Lur'e, L. A. Marshak and A. N. Murin. 14(12), 3083–4(C) (Jun. 1973); CPM-7306D0925

Musher, S. L.—Transient Behavior of a System of Parametrically Excited Spin Waves (T)—V. E. Zakharov, V. S. L'vov and S. L. Musher. 14(3), 710–5 (Sep. 1972); CPM-7209D0144

Mushinskii, V. P.—Reflection and Absorption of InSe Crystals in the IR Region of the Spectrum (E)—V. P. Mushinskii and V. I. Kobolev. 14(4), 1098–100(C) (Oct. 1972); CPM-7210D0913

Mussil, V. V.—Faraday Effect in the Region of the Intrinsic Absorption Edge in CdSe (E)—V. V. Mussil, V. V. Karmazin and V. K. Miloslavskii. 14(12), 3004–7 (Jun. 1973); CPM-7306D0846

Myl'nikova, I. E.—Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14(10), 2539–42 (Apr. 1973); CPM-7304E1185

Mylov, V. P.—High–Pressure Phase Transitions of the First Kind in Rochelle Salt (E)—V. P. Mylov, G. G. Leonidova and B. R. Churagulov. 14(7), 1893–4(C) (Jan. 1973); CPM-7301C0853

Myshlyaev, M. M.—Mosaic Structure of Germanium in Longevity and Creep Testing (E)—A. N. Bakhtibaev, V. I. Betekhtin, S. A. Ivanov, M. M. Myshlyaev and I. I. Khodos. 14(1), 117–21 (Jul. 1972); CPM-7207D1076

—Influence of the Deformation Method on the Nature of Dislocation Loops in Aluminum (E)—M. M. Myshlyaev, S. S. Olevskii, S. K. Maksimov and V. A. Likhachev. 14(3), 785–6(C) (Sep. 1972); CPM-7209D0219

N

Naberezhnykh, V. P.—Determination of the Mean Free Path of Electrons in Metals (T)—V. P. Naberezhnykh, L. T. Tsymbal and M. S. Purchinskii. 14(2), 431–3 (Aug. 1972); CPM-7208E0588

Nabokin, P. I.—Anisotropy of the Spin Wave Excitation Threshold (T)—P. I. Nabokin and V. G. Shavrov. 14(2), 434–6 (Aug. 1972); CPM-7208E0591

—Instability of Domains in Nonlinear Ferromagnetic Resonance (E)—N. N. Kiryukhin, B. M. Mikhailov, Ya. A. Monosov and P. I. Nabokin. 14(6), 1573–4(C) (Dec. 1972); CPM-7212D0909

Nadgornyi, É. M.—Flow–Stress Spectroscopy of NaCl Crystals Containing Color Centers (E)—G. A. Ermakov and É. M. Nadgornyi. 14(4), 1101–3(C) (Oct. 1972); CPM-7210D0916

—Kinetics of Motion of Slip Bands in NaCl Crystals (E)—S. I. Zaitsev and É. M. Nadgornyi. 14(11), 2787–90 (May 1973); CPM-7305D1015

—Temperature Dependence of Dislocation Mobility in Gamma Irradiated (10^7 rad Dose) NaCl Crystals (E/T)—G. A. Ermakov and É. M. Nadgornyi. 14(12), 2962–6 (Jun. 1973); CPM-7306D0804

Nagaev, É. L.—Non–Heisenberg Exchange Interaction and Effects Due to this Interaction (T)—V. M. Matveev and É. L. Nagaev. 14 (2), 408–15 (Aug. 1972); CPM-7208E0565

—Canted Antiferromagnetism and the Magnetization Curve of Conducting Antiferromagnets (T)—É. L. Nagaev. 14(3), 658–63 (Sep. 1972); CPM-7209D0092

Nagibarov, V. R.—Photon Echo in Ruby (E)—U. Kh. Kopvillem, V. R. Nagibarov, V. A. Pirozhkov, V. V. Samartsev and R. G. Usmanov. 14(6), 1544–5(C) (Dec. 1972); CPM-7212D0880

—Concentration Dependences of the Intensities of Electric–Dipole Induction and Echo (T)—O. N. Gadomskii, V. R. Nagibarov and N. K. Solovarov. 14(9), 2428–9(C) (Mar. 1973); CPM-7303E1252

Nagornyi, V. Ya.—X–Ray Spectroscopic Investigation of Iron Germanides (E)—V. V. Nemoshkalenko, V. Ya. Nagornyi and L. I. Nikolaev. 14(7), 1835–6(C) (Jan. 1973); CPM-7301C0795

Naimi, E. K.—Internal Friction in Pure Tellurium Single Crystals (E)—G. B. Bagduev, A. M. Magdiev, E. K. Naimi and N. A. Tyapunina. 14(10), 2650–1(C) (Apr. 1973); CPM-7304E1296

Naletov, V. L.—Effect of Sn and Te Impurity on the Magnetic Susceptibility of $Bi_{88}Sb_{12}$ Alloy (E)—V. I. Korishev, G. A. Ivanov and V. L. Naletov. 14(2), 500–1(C) (Aug. 1972); CPM-7208E0657

Nanai, L.—Absorption and Luminescence Spectra of Red Lead Monoxide (E)—V. A. Gaisin, L. Nanai and D. S. Nedzvetskii. 14 (9), 2378–9(C) (Mar. 1973); CPM-7303E1202

Narbut, T. P.—"Intrinsic" Steps on the Current–Voltage Characteristics of Josephson Point Contacts (E)—S. I. Bondarenko, I. M. Dmitrienko and T. P. Narbut. 14(2), 295–9 (Aug. 1972); CPM-7208E0452

Natsik, V. D.—Radiation of Rayleigh Waves by Edge Dislocations Emerging at the Surface of a Crystal (T)—V. D. Natsik and A. N. Burkanov. 14(5), 1111–6 (Nov. 1972); CPM-7211A1363

—Acoustic Emission Associated with the Annihilation of Dislocations (T)—V. D. Natsik and K. A. Chishko. 14(11), 2678–82 (May 1973); CPM-7305D0906

Naumenko, V. M.—Far–Infrared Absorption Spectrum of Antiferromagnetic Nickel Tungstate (E)—V. I. Kut'ko, V. M. Naumenko and A. I. Zvyagin. 14(11), 2900–1(C) (May 1973); CPM-7305D1128

Naumovets, A. G.—Simultaneous Adsorption of Cesium and Barium onto Tungsten and Niobium Crystal Surfaces (E/T)—Yu. M. Konoplev, A. G. Naumovets and A. G. Fedorus. 14(2), 273–8 (Aug. 1972); CPM-7208E0430

Nechiporenko, E. P.—Coalescence in Two–Phase Alloys (T/E)—E. P. Nechiporenko, V. V. Slezov, V. V. Sagalovich, N. E. Sagalovich and V. L. Khrebtov. 14(5), 1259–63 (Nov. 1972); CPM-7211A1511

Nechiporuk, Yu. A.—Nature of the Spin Echo in Ferrites (E)—I. A. Deryugin, Yu. A. Nechiporuk and A. V. Tychinskii. 14(1), 264–5 (C) (Jul. 1972); CPM-7207D1223

Nedzvetskii, D. S.—Recombination Radiation Involving Participation of Isoelectronic Centers in Antimony–Doped Gallium Phosphide (E)—D. S. Nedzvetskii, S. I. Radautsan and Yu. I. Maksimov. 14 (2), 551–3(C) (Aug. 1972); CPM-7208E0708

—Absorption and Luminescence Spectra of Red Lead Monoxide (E)—V. A. Gaisin, L. Nanai and D. S. Nedzvetskii. 14(9), 2378–9(C) (Mar. 1973); CPM-7303E1202

—Absorption and Luminescence Spectra of Diamond Crystals in the Red Region of the Spectrum (E/T)—D. S. Nedzvetskii and V. A. Gaisin. 14(10), 2535–8 (Apr. 1973); CPM-7304E1181

Negreskul, V. V.—Thermal Conductivity of $GaAs_{1-x}P_x$ Solid Solutions (E)—L. V. Gorchak, V. V. Negreskul and A. G. Cheban. 14(9), 2382–4(C) (Mar. 1973); CPM-7303E1206

Neklyudov, I. M.—Effect of Ultrasonic Vibrations on a Crystal's Resistance to Plastic Deformation (E)—I. A. Gindin, I. M. Neklyudov, G. N. Malik and O. T. Rozumnyi. 14(5), 1126–30 (Nov. 1972); CPM-7211A1378

—Decreased Dislocation Density in Crystals Due to the Effect of Ultrasonic Vibrations (E)—I. A. Gindin, O. I. Bolchok, G. N. Malik and I. M. Neklyudov. 14(7), 1828–9(C) (Jan. 1973); CPM-7301C0788

—Effect of Ultrasonic Irradiation on the Development of Twinning in Cadmium (E)—I. A. Gindin, O. I. Volchok and I. M. Neklyudov. 14(11), 2762–3 (May 1973); CPM-7305D0990

Nelaev, V. V.—Focusing Influence of Vacancies on the Propagation of Atomic Collision Chains. Elongation of Chains (T)—É. Ya. Mikhlin and V. V. Nelaev. 14(7), 1866–8(C) (Jan. 1973); CPM-7301C0826

Nemchinov, Yu. V.—"Rotational Hall Effect" in a Nickel Single Crystal (E)—E. P. Svirina and Yu. V. Nemchinov. 14(8), 2161–2 (C) (Feb. 1973); CPM-7302E1287

Nemirovskii, Yu. B.—Recombination and Capture Probabilities in Potassium Iodide–Thallium Crystals (E)—E. F. Martynovich, I. A. Parfianovich and Yu. B. Nemirovskii. 14(4), 1061–2(C) (Oct. 1972); CPM-7210D0876

Nemoshkalenko, V. V.—X-Ray Spectroscopic Investigation of Iron Germanides (E)—V. V. Nemoshkalenko, V. Ya. Nagornyi and L. I. Nikolaev. 14(7), 1835–6(C) (Jan. 1973); CPM-7301C0795

Nesmelov, N. S.—Formation of Luminescence Centers in Nonactivated Alkali Halide Crystals in Very Strong Electric Fields (E)—N. I. Lebedeva and N. S. Nesmelov. 14(4), 1106–7(C) (Oct. 1972); CPM-7210D0921

Nesterov, V. I.—Impurity Atoms of Sn^{119} in the Helicoidal Antiferromagnet Au_3Mn (E)—N. N. Delyagin, E. N. Kornienko and V. I. Nesterov. 14(6), 1590–1(C) (Dec. 1972); CPM-7212D0926

Nesterova, N. N.—Anomalous Behavior of the Optical Absorption Coefficient of Lead Magnoniobate Single Crystals in the Region of a Broad Ferroelectric Transition (E)—L. S. Kamzina, N. N. Krainik and N. N. Nesterova. 14(7), 1853–5(C) (Jan. 1973); CPM-7301C0813

Netusov, Yu. K.—Structure of Small-Angle Torsion Boundaries in the (001) Plane (E)—V. S. Postnikov, K. S. Solov'ev, V. M. Ievlev, I. V. Zolotukhin and Yu. K. Netusov. 14(5), 1311–2(C) (Nov. 1972); CPM-7211A1563

Neumerzhitskii, V. T.—Fine Structure of a Moving Superdislocation (T)—V. T. Neumerzhitskii and É. V. Kozlov. 14(6), 1428–30 (Dec. 1972); CPM-7212D0764

Nevinnyi, Yu. A.—Secondary Electron Emission from Radioactive Precipitates (E)—B. V. Bobykin, S. K. Lyubov and Yu. A. Nevinnyi. 14(11), 2912–3(C) (May 1973); CPM-7305D1140

Nguyen, Dao Tkhu—Self-Interaction of Finite-Amplitude Magnetoelastic Waves (E)—Dao Tkhu Nguyen, V. A. Krasil'nikov, S. B. Samorukov and V. I. Uchastkin. 14(10), 2632–3(C) (Apr. 1973); CPM-7304E1278

Nigmatullin, R. R.—Theory of Paramagnetic Resonance Saturation in a Solid at Low Temperatures (T)—B. I. Kochelaev and R. R. Nigmatullin. 14(11), 2880–3 (May 1973); CPM-7305D1108

Nikanorov, S. P.—Temperature Dependences of the Elastic Constants of Bismuth (E)—Yu. A. Burenkov, A. A. Valiev, S. P. Nikanorov and A. V. Stepanov. 14(1), 215–6(C) (Jul. 1972); CPM-7207D1174

Nikitin, V. V.—Influence of Mechanical Stresses on the Hydrolysis of Bonds on the Surface of Glass (E)—V. A. Bershtein, Yu. N. Movchan and V. V. Nikitin. 14(9), 2422–3(C) (Mar. 1973); CPM-7303E1246

Nikitin, Yu. V.—Temperature Dependence of the Amplitude of the Quantum Oscillations of the Resistance of Thin Tin Films (E/T)—Yu. F. Komnik, E. I. Bukhshtab, Yu. V. Nikitin and Ch. Sulkovskii. 14(2), 543–5(C) (Aug. 1972); CPM-7208E0700

Nikitina, P. A.—Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14 (10), 2539–42 (Apr. 1973); CPM-7304E1185

Nikolaev, I. N.—Characteristics of the Alpha–Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148

Nikolaev, L. I.—X-Ray Spectroscopic Investigation of Iron Germanides (E)—V. V. Nemoshkalenko, V. Ya. Nagornyi and L. I. Nikolaev. 14(7), 1835–6(C) (Jan. 1973); CPM-7301C0795

Nikolaev, V. I.—"Magnetic Anomalies" in the Mössbauer Effect (T)—V. M. Belova and V. I. Nikolaev. 14(1), 111–6 (Jul. 1972); CPM-7207D1070

—Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

—Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14 (2), 530–2(C) (Aug. 1972); CPM-7208E0687

—"Magnetic Anomaly" of the Probability of the Mössbauer Effect in Invar (E)—V. M. Belova, E. A. Brychkov, E. K. Zakharov, V. I. Nikolaev and S. S. Yakimov. 14(9), 2404–5(C) (Mar. 1973); CPM-7303E1228

Nikulitsa, I. N.—Diffusion and Solubility of Co in GaAs (E)—G. S. Kulikov and I. N. Nikulitsa. 14(9), 2335–8 (Mar. 1973); CPM-7303E1159

Nistiryuk, I. V.—Influence of the Adsorption of Impurities on the Shape of a Diffusion Curve (E)—R. Sh. Malkovich, V. A. Mashina and I. V. Nistiryuk. 14(12), 3079–80(C) (Jun. 1973); CPM-7306D0921

Nizamidinov, S.—Accelerating Effect of Ultraviolet Radiation on Submicroscopic Crack Formation in Loaded Polymers (E)—Kh. Akimbekov, V. S. Kuksenko, S. Nizamidinov, A. I. Slutsker and A. A. Yastrebinskii. 14(9), 2339–43 (Mar. 1973); CPM-7303E1163

Nomerovannaya, L. V.—Optical Absorption in Tungsten at T=77°K (E)—L. V. Nomerovannaya, M. M. Kirillova and M. M. Noskov. 14(2), 541–2(C) (Aug. 1972); CPM-7208E0698

Noskov, M. M.—Optical Absorption in Tungsten at T=77°K (E)—L. V. Nomerovannaya, M. M. Kirillova and M. M. Noskov. 14(2), 541–2(C) (Aug. 1972); CPM-7208E0698

—Optical Properties of Copper–Nickel Alloys in the Visible and Ultraviolet Regions of the Spectrum (E)—I. I. Sasovskaya and M. M. Noskov. 14(4), 857–9 (Oct. 1972); CPM-7210D0672

Nosova, L. V.—Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Novak, I. I.—Quantum Efficiency of the Internal Photoelectric Effects and Impact Ionization in Germanium (E)—V. N. Ivakhno and I. I. Novak. 14(1), 157–60 (Jul. 1972); CPM-7207D1116

Novik, V. K.—Intrinsic Absorption and Thermal Properties of Stibiotantalite (E/T)—V. K. Novik, N. F. Karyakina and V. A. Timoshenkov. 14(5), 1288–90 (Nov. 1972); CPM-7211A1540

Novikov, B. V.—Spectral Investigation of Auto-Photoemission from CdS Single Crystals under Pulsed and Constant Voltage Conditions (E)—B. V. Novikov, A. E. Cherednichenko and P. G. Shlyakhtenko. 14(1), 14–7 (Jul. 1972); CPM-7207D0973

—Bound Exciton Luminescence in Germanium Crystals (E)—E. F. Gross, B. V. Novikov and N. S. Sokolov. 14(2), 368–71 (Aug. 1972); CPM-7208E0525

—Exciton Spectrum of Photoconductivity in Zinc Sulfide Crystals (E)—A. V. Il'inskii, B. V. Novikov, L. G. Suslina and E. B. Shadrin. 14(7), 1673–7 (Jan. 1973); CPM-7301C0633

Novikov, N. N.—Influence of Placing Dislocations at Starting Positions on the Kinetics of Dislocation Motion in NaCl Crystals (E)—V. A. Makara, N. N. Novikov and O. V. Rudenko. 14(1), 261–3(C) (Jul. 1972); CPM-7207D1220

—Investigation of the Kinetics of Dislocation Motion in Silicon (E)—N. N. Novikov, N. A. Badilenko and O. P. Butchenko. 14(5), 1356–8(C) (Nov. 1972); CPM-7211A1608

Novikov, V. N.—Optical Properties of V_2O_3 in the Region of the Phase Transition (E/T)—M. S. Kozyreva, V. N. Novikov and B. A. Tallerchik. 14(3), 639–43 (Sep. 1972); CPM-7209D0073

Novikov, Yu. N.—Mössbauer Spectroscopic Investigation of the Structure of Layered Compounds of Graphite and Iron (E)—R. A. Stukan, Yu. N. Novikov, V. A. Povitskii and A. N. Salugin. 14 (11), 2914–5(C) (May 1973); CPM-7305D1142

Novoseletskii, N. E.—Possibility of Fermi Resonance between a Local Impurity Vibration and the Vibrations of the Host Lattice of a Crystal (E/T)—M. Ya Valakh, M. P. Lisitsa, N. E. Novoseletskii and A. M. Yaremko. 14(3), 702–5 (Sep. 1972); CPM-7209D0136

Nurullaev, Yu. G.—Thermal Conductivity of Ion-Radical Salts of Tetracyanoquinodimethane (E)—A. V. Petrov, Yu. G. Nurullaev, R. M. Vlasova, V. V. Kuzina and A. I. Sherle. 14(6), 1594–5(C) (Dec. 1972); CPM-7212D0930

Nyan, Fan Ba—Franz-Keldysh Effect in the Impurity Absorption Region (T/E)—Fan Ba Nyan, V. B. Stopachinskii and M. V. Fok. 14(12), 3000–3 (Jun. 1973); CPM-7306D0842

O

Obronov, V. G.—Transmission of Information through Au Boundary Layers (E)—G. I. Distler, V. G. Obronov and Yu. M. Gerasimov. 14(3), 580–3 (Sep. 1972); CPM-7209D0014

Okorokov, A. I.—Magnetization of $Y_3Fe_5O_{12}$ near the Curie Point (E)—A. I. Okorokov and Ya. A. Kasman. 14(10), 2622–3(C) (Apr. 1973); CPM-7304E1268

Okulich, V. I.—Equilibrium Configuration of Vacancies in Si and Ge (T)—V. A. Panteleev and V. I. Okulich. 14(2), 523–4(C) (Aug. 1972); CPM-7208E0680

Okuneva, N. M.—Some Electronic Properties of Heavily Doped p-Type GaAs (E)—K. P. Abdurakhmanov, B. A. Kotov, N. M. Okuneva, É. L. Plachenova and O. A. Usov. 14(9), 2234–6 (Mar. 1973); CPM-7303E1058

Olevskii, S. S.—Influence of the Deformation Method on the Nature of Dislocation Loops in Aluminum (E)—M. M. Myshlyaev, S. S. Olevskii, S. K. Maksimov and V. A. Likhachev. 14(3), 785–6(C) (Sep. 1972); CPM-7209D0219

Ol'shanetskii, B. Z.—Low-Energy Electron Diffraction from a (111) Germanium Surface During the Early Stages of Oxygen Adsorption (E)—B. Z. Ol'shanetskii, N. I. Makrushin and A. I. Volokitin. 14(11), 2713–6 (May 1973); CPM-7305D0941

Omel'yanovskaya, N. M.—Relaxation of the Electron Emission from Germanium Bombarded with N^+_2 and Kr^+ Ions (E)—N. M. Omel'yanovskaya and S. Ya. Lebedev. 14(6), 1542–3(C) (Dec. 1972); CPM-7212D0878

—Temperature and Current Studies of the Relaxation Effect in Ion–Electron Emission in Si (E)—N. M. Omel'yanovskaya, S. Ya. Lebedev and S. D. Panin. 14(7), 1895–6(C) (Jan. 1973); CPM-7301C0855

Onishchenko, É. V.—Magnetic Structure of Small Weakly Nonspherical Ferromagnetic Particles (T)—A. M. Afanas'ev, É. A. Manykin and É. V. Onishchenko. 14(9), 2175–80 (Mar. 1973); CPM-7303E0999

Orlov, L. G.—Effect of Dimensional Factors on Slip and Hardening of Silicon Iron Single Crystals (E)—L. G. Orlov and G. F. Shitikova. 14(2), 507–8(C) (Aug. 1972); CPM-7208E0664

—Influence of the Surface Tension on the Heterogeneous Nucleation of Dislocations in Crystals (T)—L. G. Orlov. 14(12), 3091–2(C) (Jun. 1973); CPM-7306D0933

Orlov, M. S.—Electron Spin Resonance of V^{2+} Ions in BaF_2 (E)—R. Yu. Abdulsabirov, V. S. Kropotov, M. S. Orlov and V. G. Stepanov. 14(11), 2917(C) (May 1973); CPM-7305D1145

Orlov, V. P.—Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583

—Surface Electric Field Arising from Three-Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Orlova, E. G.—Experimental Confirmation of Certain Many-Electron Processes (E)—M. A. Blokhin, E. G. Orlova and I. G. Shveitser. 14(8), 2146–7(C) (Feb. 1973); CPM-7302E1272

Orlyukas, A. S.—Acoustic Investigations of Sb_2S_3 Crystals (E)—I. P. Grigas, V. F. Kunigelis, A. S. Orlyukas and V. I. Samulionis. 14(3), 796–7(C) (Sep. 1972); CPM-7209D0230

Osad'ko, I. S.—Thermal Broadening and Shift of Phononless Impurity Optical Lines (T)—I. S. Osad'ko. 14(10), 2522–6 (Apr. 1973); CPM-7304E1168

Osiko, V. V.—Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

—Recombination Luminescence in the Crystals $Y_3Al_5O_{12}$–TR_1, TR_2 (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker and V. V. Osiko. 14(7), 1820–2 (Jan. 1973); CPM-7301C0780

—Study of the Processes of Deactivation of the Metastable State of Excited Nd^{3+} Ions in LaF_3 Crystals (E)—Yu. K. Voron'ko, V. V. Osiko, N. V. Savost'yanova, V. S. Fedorov and I. A. Shcherbakov. 14(9), 2294–9 (Mar. 1973); CPM-7303E1118

Osip'yan, Yu. A.—Kinetics of the Photoplastic Effect and Its Dependence on Orientation (E)—Yu. A. Osip'yan and I. B. Savchenko. 14(7), 1723–5 (Jan. 1973); CPM-7301C0683

—Dislocation-Induced Anisotropic Absorption of Polarized Light in Cadmium Sulfide (E)—N. V. Klassen and Yu. A. Osip'yan. 14(12), 3094–5(C) (Jun. 1973); CPM-7306D0936

Osminin, V. S.—Optical Delocalization of Holes from Tl^{2+} Centers in KCl:Tl (E)—V. S. Osminin. 14(8), 1996–2001 (Feb. 1973); CPM-7302E1122

Osvenskii, V. B.—Effect of the Type and Concentration of Structural Point Defects on the Electrophysical Properties of Undoped Gallium Arsenide (E/T)—E. V. Solov'eva, V. V. Karataev, M. G. Mil'vidskii, V. B. Osvenskii and O. G. Stolyarov. 14(2), 441–4 (Aug. 1972); CPM-7208E0598

—Precipitation of Copper in GaAs Single Crystals (E)—L. M. Morgulis, M. G. Mil'vidskii, V. B. Osvenskii and T. G. Yugova. 14(9), 2436–8(C) (Mar. 1973); CPM-7303E1260

—Mobility of Individual Dislocations in Gallium Arsenide (E)—V. B. Osvenskii and L. P. Kholodnyi. 14(11), 2822–5 (May 1973); CPM-7305D1050

Otko, A. I.—Electron Spin Resonance of Gd^{3+} in $CsEu(MoO_4)_2$ and $CsY(MoO_4)_2$ (E)—A. I. Otko, L. N. Pelikh and A. I. Zvyagin. 14(11), 2918(C) (May 1973); CPM-7305D1146

Ovander, L. N.—Dependence of the Raman Scattering Tensor on the Frequency of Incident Light in the Presence of Intermolecular Vibrations (T)—L. N. Ovander. 14(9), 2380–1(C) (Mar. 1973); CPM-7303E1204

Ovchinnikov, A. A.—Relaxation of the Vibrational Energy in Methane Crystals (T)—A. A. Ovchinnikov and N. S. Érikhman. 14(10), 2451–7 (Apr. 1973); CPM-7304E1097

Ovchinnikova, T. L.—Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Ledneva, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158

—Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

—Distinguishing Features of Magnetic Properties of Single-Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1558

Ozherel'ev, B. V.—Determination of the Probability of $\Delta M_S = 2$ Transitions in ESR Spectra by Microwave Saturation Method (E)—O. Ya. Grinberg, A. A. Dubinskii, B. V. Ozherel'ev, A. A. Chistota and Ya. S. Lebedev. 14(11), 2886–7(C) (May 1973); CPM-7305D1114

P

Pakhomov, A. S.—Method for Separating Different Components of the Ferrimagnetic Anisotropy (T)—R. Z. Levitin and A. S. Pakhomov. 14(5), 1276–9 (Nov. 1972); CPM-7211A1528

Palatnik, L. S.—Magnetoresistance of Island Films of Metals on Insulators (E)—B. T. Boiko, L. S. Palatnik, V. P. Kopach and S. B. Melent'ev. 14(4), 1090–1(C) (Oct. 1972); CPM-7210D0905

—Elastic Stresses and Strains at the Interface of an Epitaxial β–Co—Cu Bicrystal (T/E)—B. G. Bord, L. S. Palatnik, A. I. Fedorenko and É. P. Fel'dman. 14(11), 2700–3 (May 1973); CPM-7305D0928

Panchenko, T. V.—Stabilization of Spontaneous Polarization of $BaTiO_3$ Single Crystals (E)—A. Yu. Kudzin and T. V. Panchenko. 14(6), 1599–600(C) (Dec. 1972); CPM-7212D0935

—Barkhausen Jumps and Stabilization of the Spontaneous Polarization of Single Crystals of $BaTiO_3$ (E)—V. M. Rudyak, A. Yu. Kudzin and T. V. Panchenko. 14(8), 2172–3(C) (Feb. 1973); CPM-7302E1238

Panchenko, T. V.—Debye Temperatures of LiF, NaF, and KI (T/E)—V. V. Panchenko and V. A. Yakovlev. 14(10), 2616(C) (Apr. 1973); CPM-7304E1262

Panin, S. D.—Temperature and Current Studies of the Relaxation Effect in Ion–Electron Emission in Si (E)—N. M. Omel'yanovskaya, S. Ya. Lebedev and S. D. Panin. 14(7), 1895–6 (C) (Jan. 1973); CPM-7301C0855

—The "Shadow Effect" in the Bombardment of Single Crystals by Heavy Ions (E)—S. D. Panin, S. Ya. Lebedev and V. E. Dubinskii. 14(8), 2123–4(C) (Feb. 1973); CPM-7302E1249

Panteleev, V. A.—Equilibrium Configuration of Vacancies in Si and Ge (T)—V. A. Panteleev and V. I. Okulich. 14(2), 523–4(C) (Aug. 1972); CPM-7208E0680

Panteleev, V. V.—Investigation of Cs Adsorption onto a GaAs (110) Surface (E)—A. Yu. Mityagin, V. P. Orlov, V. V. Panteleev, K. A. Khronopulo and N. Ya. Cherevatskii. 14(7), 1623–6 (Jan. 1973); CPM-7301C0583

Panyushkin, V. N.—Mössbauer Effect and Superconductivity of Tin under Pressure (T/E)—V. N. Panyushkin and E. N. Yakovlev. 14(6), 1579–80(C) (Dec. 1972); CPM-7212D0915

—Characteristics of the Alpha→Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148

Parfen'ev, R. V.—Some Features of the Valence Band of Bi_2Te_3 (E)—V. V. Sologub, A. D. Goletskaya and R. V. Parfen'ev. 14(3), 783–4 (C) (Sep. 1972); CPM-7209D0217

Parfen'eva, L. S.—Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

—Thermal Conductivity of the Me_3X_4 Chalcogenides of Rare Earth Elements (E/T)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(3), 720–4 (Sep. 1972); CPM-7209D0154

—Thermal Conductivity of the La_2Te_3–La_3Te_4 System (E)—I. A. Smirnov, L. S. Parfen'eva and V. M. Sergeeva. 14(4), 899–901 (Oct. 1972); CPM-7210D0714
—Thermal Conductivity of Polymeric Modifications of Nd_2S_3 (E)—I. A. Smirnov, L. S. Parfen'eva, V. M. Sergeeva and T. B. Zhukova. 14(8), 2142–3(C) (Feb. 1973); CPM-7302E1268
—Thermal Conductivity of Sm_3S_4 (E)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(9), 2412–3(C) (Mar. 1973); CPM-7303E1236
Parfenova, N. N.—Effective Magnetic Fields at Sn^{119} Nuclei in Some Magnetically Ordered Perovskites (E)—V. A. Bokov, G. V. Popov, N. N. Parfenova and G. G. Yushina. 14(1), 83–6 (Jul. 1972); CPM-7207D1042
Parfianovich, I. A.—Recombination and Capture Probabilities in Potassium Iodide–Thallium Crystals (E)—E. F. Martynovich, I. A. Parfianovich and Yu. B. Nemirovskii. 14(4), 1061–2(C) (Oct. 1972); CPM-7210D0876
Pashkov, V. I.—Spontaneous Change in the Radius of Curvature of Plastically Deformed Silicon Slices (E)—P. V. Pavlov, V. I. Pashkov, G. I. Uspenskaya and Z. N. Gurevich. 14(2), 537–8(C) (Aug. 1972); CPM-7208E0694
Pashkovskii, M. V.—Quantum Oscillations of the Magnetoresistance of $Cd_xHg_{1-x}Te$ (E)—N. N. Berchenko, V. E. Kreva and M. V. Pashkovskii. 14(9), 2447–8(C) (Mar. 1973); CPM-7303E1271
Pastur, L. A.—Elastic Deformations Arising during Crystal Growth (T)—L. A. Pastur and É. P. Fel'dman. 14(9), 2322–4 (Mar. 1973); CPM-7303E1146
Pasynkov, R. E.—Photodomain Effect and Deformation in SbSI Single Crystals (E)—A. A. Grekov, R. E. Pasynkov and E. D. Rogach. 14(8), 1919–21 (Feb. 1973); CPM-7302E1045
Paugurt, A. P.—Nuclear Magnetic Resonance and Weak Ferromagnetism in $FeBO_3$ (E)—M. P. Petrov, G. A. Smolenskii, A. P. Paugurt, S. A. Kizhaev and M. K. Chizhov. 14(1), 87–91 (Jul. 1972); CPM-7207D1046
Paukov, I. E.—Influence of Pressure on the Thermodynamic Properties of NH_4Cl near the Phase Transition Point (E)—E. B. Amitin, Yu. A. Kovalevskaya and I. E. Paukov. 14(11), 2902–3(C) (May 1973); CPM-7305D1130
Paukshte, Yu. A.—Anisotropy of the Thermal Expansion of InTe (E)—Yu. A. Paukshte and L. Z. Dankus. 14(5), 1316–7(C) (Nov. 1972); CPM-7211A1568
Paverman, V. S.—Possible Parametric Resonance in Degenerate n–Type InSb (E)—N. L. Tsintsadze and V. S. Paverman. 14(11), 2890–1(C) (May 1973); CPM-7305D1118
Pavlichenko, V. I.—Influence of Structure Defects on the Electrical Properties and Luminescence of α–SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206
Pavlov, A. N.—Decompostion of Impurity Associations in Lithium Fluroide Single Crystals (E)—A. A. Blistanov, A. N. Pavlov and M. P. Shaskol'skaya. 14(4), 1051–2(C) (Oct. 1972); CPM-7210D0866
Pavlov, N. B.—Nonlinear Microwave Properties of Narrow Superconducting Films (E)—V. N. Gubankov, K. K. Likharev and N. B. Pavlov. 14(11), 2721–5 (May 1973); CPM-7305D0949
Pavlov, P. V.—Spontaneous Change in the Radius of Curvature of Plastically Deformed Silicon Slices (E)—P. V. Pavlov, V. I. Pashkov, G. I. Uspenskaya and Z. N. Gurevich. 14(2), 537–8(C) (Aug. 1972); CPM-7208E0694
Pavlov, S. T.—Galvanomagnetic and Thermomagnetic Effects in p–Type InSb (E)—P. V. Tamarin, S. S. Shalyt, I. G. Lang and S. T. Pavlov. 14(1), 47–57 (Jul. 1972); CPM-7207D1006
Pavlovich, V. V.—Electromagnetic Excitation of Sound in Semimetals in Moderately Strong Magnetic Fields (T/E)—P. E. Zil'berman and V. V. Pavlovich. 14(2), 504–6(C) (Aug. 1972); CPM-7208E0661
—Resonant Dynamic Breakdown of Screening in the Field of a Strong Electromagnetic Wave (T)—Yu. I. Balkarei, V. V. Pavlovich and É. M. Épshtein. 14(11), 2799–801 (May 1973); CPM-7305D1027
Pavlyukov, L. S.—Characteristics of the Alpha→Beta Tin Phase Transformation Under Pressure (E)—I. N. Nikolaev, V. P. Mar'in, V. N. Panyushkin and L. S. Pavlyukov. 14(8), 2022–4 (Feb. 1973); CPM-7302E1148
Ped'ko, A. V.—Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822
Peka, G. P.—Carrier Recombination in GaAs when Carriers are Generated in the Vicinity of the Surface (E/T)—G. P. Peka and L. G. Shepel'. 14(8), 2025–30 (Feb. 1973); CPM-7302E1151
—Impurity Recombination Radiation Excited in GaAs by Strongly Absorbed Radiation (E/T)—G. P. Peka, N. L. Dmitruk and L. G. Shepel'. 14(11), 2866–9 (May 1973); CPM-7305D1094
Pelikh, L. N.—Electron Spin Resonance of Gd^{3+} in $CsEu(MoO_4)_2$ and $CsY(MoO_4)_2$ (E)—A. I. Otko, L. N. Pelikh and A. I. Zvyagin. 14(11), 2918(C) (May 1973); CPM-7305D1146
Perel', V. I.—Circular Polarization of Recombination Light of Semiconductors in a Weak Magnetic Field (T)—M. I. D'yakonov and V. I. Perel'. 14(5), 1245–50 (Nov. 1972); CPM-7211A1497
Perelyaev, V. A.—Heat of the Semiconductor–Metal Phase Transition in V_2O_3 (E)—V. G. Khlyustov, A. S. Borukhovich and V. A. Perelyaev. 14(7), 1848–9(C) (Jan. 1973); CPM-7301C0808
Peresada, G. I.—Pressure Dependences of the Elastic Moduli of InSb (E)—G. I. Peresada. 14(6), 1546–7(C) (Dec. 1972); CPM-7212D0882
Perlin, E. Yu.—Multiphoton Interband Transitions in a Quantizing Magnetic Field (T)—I. A. Chaikovskii, V. A. Kovarskii and E. Yu. Perlin. 14(3), 620–4 (Sep. 1972); CPM-7209D0054
—Stimulated Antiresonance in Crystals (T)—E. Yu. Perlin. 14(7), 1837–8(C) (Jan. 1973); CPM-7301C0797
Perlin, Yu. E.—Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–8 (Apr. 1973); CPM-7304E1196
Permogorov, S. A.—Spectroscopic Observation of the Lifetime of Free Excitons (T/E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1193–8 (Nov. 1972); CPM-7211A1445
—Kinetics of Bound–Exciton Formation in CdS Crystals (E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1331–2(C) (Nov. 1972); CPM-7211A1583
—Effects of Spatial Dispersion in the Reflection Spectra of Crystals Obtained for Oblique Incidence of Light (T/E)—S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(12), 3051–6 (Jun. 1973); CPM-7306D0893
Pershits, Ya. N.—Formation of Molecular Impurity Centers and Complexes During Electrolysis of Potassium Chloride (E)—Ya. N. Pershits and N. N. Vasil'ev. 14(11), 2898–9(C) (May 1973); CPM-7305D1126
—Conductivity of Bleached Potassium Chloride Crystals Containing Impurity Complexes (E)—Ya. N. Pershits and V. A. Andrusich. 14(12), 3096–7(C) (Jun. 1973); CPM-7306D0938
Personov, R. I.—Broadening, Profile, and Shift of Phononless Lines in the Spectra of Impure n–Paraffin Crystals Recorded in the 4.2–77°K Range (E)—E. I. Al'shits, É. D. Godyaev and R. I. Personov. 14(6), 1385–92 (Dec. 1972); CPM-7212D0721
Perveev, A. F.—Spectroscopic Method for Determining the Sorption and Porosity Properties of Thin Solid Films (E)—A. F. Perveev, G. A. Muranova and V. M. Zolotarev. 14(10), 2510–2 (Apr. 1973); CPM-7304E1156
Peshkov, E. V.—Unusual Effect of Isotopic and Isomorphous Substitution in Ferroelectric Crystals of the Triglycine Sulfate Group (E)—E. V. Peshikov. 14(6), 1377–80 (Dec. 1972); CPM-7212D0713
Peskin, V. F.—New Ferroelectric : Antimony Orthoniobate (T)—A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14(2), 509–10(C) (Aug. 1972); CPM-7208E0666
Petinov, V. I.—Magnetic Properties of Small Nickel Aerosol Particles in the 4.2–300°K Range (E/T)—A. B. Petrov, V. I. Petinov and V. V. Shevchenko. 14(10), 2595–8 (Apr. 1973); CPM-7304E1241
Petrakovskaya, É. A.—Magnetoelastic Coupling of Fe^{3+} Ions in Yttrium Iron Garnet (E/T)—É. A. Petrakovskaya and É. M. Smokotin. 14(11), 2888–9(C) (May 1973); CPM-7305D1116
Petropavlovskii, M. D.—Damping of Oscillations at the Interface Between the Solid and Liquid Phases of Bismuth by a Magnetic Field (E)—G. V. Komarov, K. A. Melikov, M. D. Petropavlovskii and A. R. Regel'. 14(2), 485–6(C) (Aug. 1972); CPM-7208E0642
Petrov, A. E.—Magnetic Properties of Small Nickel Aerosol Particles in the 4.2–300°K Range (E/T)—A. E. Petrov, V. I. Petinov and V. V. Shevchenko. 14(10), 2595–8 (Apr. 1973); CPM-7304E1241
Petrov, A. V.—Thermal Conductivity of Ion–Radical Salts of Tetracyanoquinodimethane (E)—A. V. Petrov, Yu. G. Nurullaev, R. M. Vlasova, V. V. Kuzina and A. I. Sherle. 14(6), 1594–5(C) (Dec. 1972); CPM-7212D0930

Petrov, É. G.—Lifting of Degeneracy of the $^4E_{1g}$ Level of Mn^{2+} Ions in Cubic Antiferromagnetic Insulators in a Static Magnetic Field (T)—É. G. Petrov and V. N. Kharkyanen. 14(6), 1560–1(C) (Dec. 1972); CPM-7212D0896

Petrov, M. P.—Nuclear Magnetic Resonance and Weak Ferromagnetism in $FeBO_3$ (E)—M. P. Petrov, G. A. Smolenskii, A. P. Paugurt, S. A. Kizhaev and M. K. Chizhov. 14(1), 87–91 (Jul. 1972); CPM-7207D1046

—Nuclear Magnetic Resonance in Ferroxplan Ferrites (E/T)—A. V. Kunevich, M. P. Petrov and B. N. Ermakov. 14(8), 2131–2(C) (Feb. 1973); CPM-7302E1257

Petrov, V. A.—Modulation of the Edge of Optical Absorption in Quantum Films by Electric Fields (T)—V. A. Petrov. 14(10), 2500–1 (Apr. 1973); CPM-7304E1146

Petrov, V. I.—Electrical Conduction Mechanism in the Ferroelectric Semiconductor SbSI (E)—E. S. Artobolevskaya, E. V. Chenskii, R. S. Gvozdover and V. I. Petrov. 14(8), 1935–9 (Feb. 1973); CPM-7302E1061

Petrov, V. M.—Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

Petrova, M. L.—Alternating-Current Field Effect in Organic Semiconductors (E)—M. L. Petrova and P. N. Zanadvorov. 14(6), 1581–2(C) (Dec. 1972); CPM-7212D0917

Pevtsov, A. B.—Frequency Dispersion of the Electrical Conductivity of Liquid Selenium and Selenium–Tellurium Alloys (E)—A. A. Andreev, A. L. Manukyan, A. B. Pevtsov and L. N. Shumilova. 14 (12), 3100–1(C) (Jun. 1973); CPM-7306D0942

Pikhtin, A. N.—Linear Electrooptical Effect in Gallium Phosphide (E)—G. F. Glinskii, A. N. Pikhtin and D. A. Yas'kov. 14(2), 291–4 (Aug. 1972); CPM-7208E0448

Pikus, G. E.—Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14(3), 732–7 (Sep. 1972); CPM-7209D0166

Pinchuk, V. G.—Ferromagnetic Resonance in Plastically Deformed Permalloy and Iron (E)—E. F. Kondrat'ev, V. G. Pinchuk and V. M. Slobodyanik. 14(5), 1352–3(C) (Nov. 1972); CPM-7211A1604

Pipa, V. I.—Theory of Deformation–Concentration Instability in Semiconductors (T)—V. I. Pipa and V. N. Piskovoi. 14(8), 1979–84 (Feb. 1973); CPM-7302E1105

Pirozhkov, V. A.—Photon Echo in Ruby (E)—U. Kh. Kopvillem, V. R. Nagibarov, V. A. Pirozhkov, V. V. Samartsev and R. G. Usmanov. 14(6), 1544–5(C) (Dec. 1972); CPM-7212D0880

Piryatinskii, Yu. P.—Temperature Dependence of the Photoconductivity Spectrum of Anthracene (E/T)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(5), 1241–4 (Nov. 1972); CPM-7211A1493

—Photovoltaic Effect in Anthracene Crystals (E)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(8), 2035–9 (Feb. 1973); CPM-7302E1161

Pisarenko, V. F.—Luminescence Centers in NaF–Eu^{2+} Crystals (E)—G. D. Potapenko and V. F. Pisarenko. 14(5), 1169–72 (Nov. 1972); CPM-7211A1421

Pisarev, R. V.—Optical Anisotropy and Cylindrical Domains in $(Gd,Tb,Eu)_3FeO_{12}$ Ferrite Garnets (E)—R. V. Pisarev, N. N. Kolpakova, Yu. M. Yakovlev, V. S. Filonich and A. G. Titova. 14 (2), 300–2 (Aug. 1972); CPM-7208E0457

Piskovoi, V. N.—Theory of Deformation–Concentration Instability in Semiconductors (T)—V. I. Pipa and V. N. Piskovoi. 14(8), 1979–84 (Feb. 1973); CPM-7302E1105

Plachenova, É. L.—Some Electronic Properties of Heavily Doped p-Type GaAs (E)—K. P. Abdurakhmanov, B. A. Kotov, N. M. Okuneva, É. L. Plachenova and O. A. Usov. 14(9), 2234–6 (Mar. 1973); CPM-7303E1058

Plakhtii, V. P.—Magnetic Structure of the Garnet Andradite (E)—V. P. Plakhtii and I. V. Golosovskii. 14(9), 2387–9(C) (Mar. 1973); CPM-7303E1211

Plakida, N. M.—Interference in Neutron Scattering in Anharmonic Crystals (T)—N. M. Plakida. 14(10), 2462–7 (Apr. 1973); CPM-7304E1108

Platkov, V. Ya.—Amplitude-Dependent Internal Friction in Superconducting and Normal Indium (E)—V. Ya. Platkov, L. N. Polunina and V. I. Startsev. 14(9), 2400–1(C) (Mar. 1973); CPM-7303E1224

Platonov, B. D.—Effect of Mechanical Stress on the Shapes of Dislocation Etch Pits in Silicon (E)—V. A. Mal'tseva, B. D. Platonov, S. Yu. Sofronova and Ya. M. Bekker. 14(4), 1053–4(C) (Oct. 1972); CPM-7210D0868

Pletnev, M. N.—Positronium Atom in Ionic Crystals with NaCl-Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14 (3), 608–12 (Sep. 1972); CPM-7209D0042

Plyushko, N. Ya.—Ferroelectric Phase Transition in a Ferroelectric–Ferromagnetic Material Subjected to a Magnetic Field (T)—I. E. Chupis and N. Ya. Plyushko. 14(11), 2907–8(C) (May 1973); CPM-7305D1135

Podsvirov, O. A.—Formation and Annealing of Defects in Germanium During Bombardment with Krypton Ions (E)—I. A. Abroyan, M. M. Kalugin and O. A. Podsvirov. 14(1), 203–4(C) (Jul. 1972); CPM-7207D1162

Podzyarei, G. A.—Exchange Broadening of the Hyperfine Components of the ESR Spectrum of Nitrogen in Diamond (E/T) —L. A. Shul'man and G. A. Podzyarei. 14(6), 1521–6 (Dec. 1972); CPM-7212D0857

Pogorel'skii, K. S.—Surface Electric Field Arising from Three-Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Pogorel'skii, Yu. V.—Influence of Screening of the Width of the "Acoustic" Forbidden Band (T)—B. D. Laikhtman and Yu. V. Pogorel'skii. 14(9), 2393–5(C) (Mar. 1973); CPM-7303E1217

Pogozhev, V. A.—Internal Effective Field During Nonuniform Rotation in Ferrite Cores (E)—O. S. Kolotov, A. A. Laptev, V. A. Pogozhev and R. V. Telesnin. 14(1), 228–9(C) (Jul. 1972); CPM-7207D1187

Pogrebnyak, V. A.—Transport Properties of Semiconductors with Nonparabolic Bands Placed in Strong Electric and Magnetic Fields (T)—V. A. Pogrebnyak. 14(4), 934–41 (Oct. 1972); CPM-7210D0749

—Analogy between a Relativistic Plasma and the Electron Gas of a Semiconductor with a Nonquadratic Dispersion Law (T)—F. G. Bass and V. A. Pogrebnyak. 14(6), 1518–20 (Dec. 1972); CPM-7212D0854

Pokhil, G. P.—Shape of the Planar Shadow for Scattering of Particles by a Thick Single Crystal (T)—G. P. Pokhil and A. F. Tulinov. 14 (7), 1669–72 (Jan. 1973); CPM-7301C0629

Pokrovskii, V. L.—Hopping Mobility in Compensated Semiconductors (T)—I. Z. Kostadinov and V. L. Pokrovskii. 14(8), 1901–5 (Feb. 1973); CPM-7302E1027

Pokrovskii, Ya. E.—Effect of Band Structure on the Recombination Mechanism of Condensed Charge Carriers in Germanium, Silicon, and Their Alloys (E/T)—Ya. E. Pokrovskii, K. I. Svistunova and N. V. Alkeev. 14(11), 2805–7 (May 1973); CPM-7305D1033

Polandov, I. N.—Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

Polinger, V. Z.—Reduction Factors of Jahn–Teller Systems (T)—V. Z. Polinger, Yu. B. Rozenfel'd, B. S. Tsukerblat and B. G. Vekhter. 14(8), 2165–7(C) (Feb. 1973); CPM-7302E1291

Politov, N. G.—Conversion of Molecular CO_3^{2-} Centers in KCl and KBr Single Crystal Presurface Layers (E)—N. G. Politov and B. M. Trakhbrot. 14(2), 483–4(C) (Aug. 1972); CPM-7208E0640

Polovinkina, V. I.—Experimental Investigation and Calculation of the X-Ray Diffraction Contrast of a Single Dislocation (E/T)—V. I. Polovinkina, É. V. Suvorov, F. N. Chukhovskii and A. A. Shmol'berg. 14(7), 1699–702 (Jan. 1973); CPM-7301C0659

Poltinnikov, S. A.—High-Frequency Magnetic Properties of Nickel—Cobalt—Zinc Ferrites (E)—S. A. Poltinnikov and O. N. Tatarenko. 14(2), 349–50 (Aug. 1972); CPM-7208E0506

—Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-(x+y)}Al_xGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

—Natural Ferromagnetic Resonance in the Garnets $Y_3Fe_{5-x}Al_xO_{12}$ (E/T)—S. A. Poltinnikov, V. P. Polyakov, O. B. Proskuryakov, V. K. Pukhova and V. M. Yudin. 14(3), 777–8(C) (Sep. 1972); CPM-7209D0211

—Frequency and Temperature Dependences of the Magnetic Permeability of Cobalt–Zinc Ferrites (E)—S. A. Poltinnikov. 14(6), 1400–3 (Dec. 1972); CPM-7212D0736

Poluéktov, I. A.—Method of Changing and Controlling Optical Properties of Photosemiconductors (T)—R. G. Maev, I. A. Poluéktov and V. I. Pustovoit. 14(7), 1738–44 (Jan. 1973); CPM-7301C0698

Polunina, L. N.—Amplitude-Dependent Internal Friction in Superconducting and Normal Indium (E)—V. Ya. Platkov, L. N. Polunina and V. I. Startsev. 14(9), 2400–1(C) (Mar. 1973); CPM-7303E1224

Polyakov, V. P.—Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-(x+y)}Al_xGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

—Natural Ferromagnetic Resonance in the Garnets $Y_3Fe_{5-x}Al_xO_{12}$ (E/T)—S. A. Poltinnikov, V. P. Polyakov, O. B. Proskuryakov, V. K. Pukhova and V. M. Yudin. 14(3), 777–8(C) (Sep. 1972); CPM-7209D0211

Ponyatovskii, E. G.—Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

Popkov, Yu. A.—Raman Scattering of Light in Antiferromagnetic Siderite (E)—Yu. A. Popkov, V. V. Eremenko, V. I. Fomin and A. P. Mokhir. 14(8), 1985–9 (Feb. 1973); CPM-7302E1111

Popolitov, V. I.—New Ferroelectric : Antimony Orthoniobate (T)—A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14(2), 509–10(C) (Aug. 1972); CPM-7208E0666

Popov, F. I.—Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

Popov, G. P.—Crystal Electric Fields in Cadmium–Cobalt and Cadmium–Nickel Ferrites–Spinels (E/T)—O. A. Bayukov, V. P. Ikonnikov, G. N. Il'inova and G. P. Popov. 14(8), 2040–3 (Feb. 1973); CPM-7302E1166

Popov, G. V.—Effective Magnetic Fields at Sn^{119} Nuclei in Some Magnetically Ordered Perovskites (E)—V. A. Bokov, G. V. Popov, N. N. Parfenova and G. G. Yushina. 14(1), 83–6 (Jul. 1972); CPM-7207D1042

—Mössbauer and Neutron-Diffraction Investigations of Spin Reorientation in $YFe_{0.8}Mn_{0.2}O_3$ (E)—M. V. Bystrov, V. A. Bokov, G. V. Popov, A. G. Kocharov, S. Ligenza, M. K. Faek and N. P. Kovaleva. 14(12), 3037–40 (Jun. 1973); CPM-7306D0879

Popov, L. E.—Effect of the Ratio of the Interaction Energies in the First and Second Coordination Spheres on Atomic Ordering in Face-Centered Cubic Solid Solutions (T/E)—N. S. Golosov, L. Ya. Pudan, G. S. Golosova and L. E. Popov. 14(5), 1280–7 (Nov. 1972); CPM-7211A1532

—Long- and Short-Range Order in Alloys with Cu_3Au Type Crystal Lattices (T)—N. S. Golosov, G. S. Golosova and L. E. Popov. 14 (10), 2493–6 (Apr. 1973); CPM-7304E1139

Popov, S. N.—Temperature Dependence of the Relaxation Time T_1 of the Electroacoustic Echo in Some Piezoelectric Crystals (E)—S. N. Popov and N. N. Krainik. 14(9), 2408–9(C) (Mar. 1973); CPM-7303E1232

Popov, V. A.—Coupled Spin Waves and the Magnon—Magnon Resonance in Antiferromagnets (T)—V. A. Popov and V. I. Skidanenko. 14(2), 421–7 (Aug. 1972); CPM-7208E0578

—Theory of Intermediate States in Antiferromagnets (T)—V. G. Bar'yakhtar, V. F. Klepikov, V. A. Popov and E. P. Stefanovskii. 14(4), 955–9 (Oct. 1972); CPM-7210D0770

Popov, Yu. F.—Magnetic and Magnetoelastic Properties of $FeBO_3$ Single Crystals (E)—A. M. Kadomtseva, R. Z. Levitin, Yu. F. Popov, V. N. Seleznev and V. V. Uskov. 14(1), 172–4 (Jul. 1972); CPM-7207D1131

—Magnetic and Magnetostrictive Properties of the Ferrite $CuCr_2O_4$ (E)—K. P. Belov, A. N. Goryaga, L. G. Antoshina and Yu. F. Popov. 14(12), 3071–2(C) (Jun. 1973); CPM-7306D0913

Popov, Yu. L.—Orientational Quadrupolar Relaxation in NMR Crystals (T)—Yu. L. Popov, N. K. Gaisin, F. I. Bashirov, K. S. Saikin and R. A. Dautov. 14(5), 1199–202 (Nov. 1972); CPM-7211A1451

Popova, E. A.—Raman Spectra of the Ferroelectric Modification of a KH_2PO_4 (KDP) Crystal (E)—E. A. Popova. 14(7), 1678–80 (Jan. 1973); CPM-7301C0638

Popovich, A. I.—Fermi Surface of Cadmium under Pressure (E)—A. A. Galkin, E. P. Degtyar', S. E. Zhevago and A. I. Popovich. 14 (3), 787–8(C) (Sep. 1972); CPM-7209D0221

Postnikov, V. S.—Internal Friction and Relative Value of Young's Modulus of Niobium in Normal and Superconducting States (E)—V. S. Postnikov, I. V. Zolotukhin and V. E. Miloshenko. 14(3), 809–10(C) (Sep. 1972); CPM-7209D0243

—Structure of Small-Angle Torsion Boundaries in the (001) Plane (E)—V. S. Postnikov, K. S. Solov'ev, V. M. Ievlev, I. V. Zolotukhin and Yu. K. Netusov. 14(5), 1311–2(C) (Nov. 1972); CPM-7211A1563

—Investigation of the Dislocation Structure of Stretch-Deformed Copper Whiskers by Analysis of Lattice Disorientations (E)—V. S. Postnikov, A. M. Belikov, A. T. Kosilov and V. B. Shepilov. 14(6), 1529–30(C) (Dec. 1972); CPM-7212D0865

—Elastic Properties and Strength of Germanium Whiskers (E)—V. S. Postnikov, S. A. Ammer and A. I. Drozhzhin. 14(10), 2636–7(C) (Apr. 1973); CPM-7304E1282

—Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

Potapenko, G. D.—Luminescence Centers in NaF–Eu^{3+} Crystals (E)—G. D. Potapenko and V. F. Pisarenko. 14(5), 1169–72 (Nov. 1972); CPM-7211A1421

Potapenko, Ya. L.—Color Centers in a Heterojunction (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(6), 1531–2 (C) (Dec. 1972); CPM-7212D0867

—Electrically Stimulated Inversion of Photoconductivity in a Heterojunction Containing Color Centers (E)—A. E. Glauberman, V. A. Drozdov and Ya. L. Potapenko. 14(11), 2860–2 (May 1973); CPM-7305D1088

Povitskii, V. A.—Mössbauer Spectroscopic Investigation of the Structure of Layered Compounds of Graphite and Iron (E)—R. A. Stukan, Yu. N. Novikov, V. A. Povitskii and A. N. Salugin. 14 (11), 2914–5(C) (May 1973); CPM-7305D1142

Povstyanyi, L. V.—Optical–Phonon Spectrum of the Antiferromagnetic Semiconductor MnTe (E)—L. V. Povstyanyi, V. I. Kut'ko and A. I. Zvyagin. 14(5), 1346–7(C) (Nov. 1972); CPM-7211A1598

Prokhorov, A. D.—Dependence on Concentration and Frequency of Spin–Lattice Relaxation of Co^{2+} in Monoclinic Tungstates (E)—A. D. Prokhorov and G. A. Tsintsadze. 14(11), 2802–4 (May 1973); CPM-7305D1030

Prokhorov, V. I.—Nucleation of Vacuum-Deposited Au on Thermal Oxides of Si (E)—V. I. Prokhorov, L. M. Sorokin and V. S. Chernyak. 14(5), 1323–4(C) (Nov. 1972); CPM-7211A1575

Prokhorov, V. M.—Dispersion of Elastic Waves in Ferroelectrics (T/E)—K. K. Ermilin, V. A. Krasil'nikov and V. M. Prokhorov. 14 (1), 251–2(C) (Jul. 1972); CPM-7207D1210

Proklov, V. V.—Acoustoelectronic Effects in Piezoelectric Semiconductors at Large Acoustic Intensities (E/T)—V. V. Proklov, Yu. V. Gulyaev and A. I. Morozov. 14(4), 832–8 (Oct. 1972); CPM-7210D0647

Prokopalo, O. I.—Positive Temperature Coefficient of Resistance in Doped Lead Titanate (E)—Yu. I. Gol'tsov, O. I. Prokopalo and L. A. Belova. 14(3), 805–6(C) (Sep. 1972); CPM-7209D0239

Prokop'ev, E. P.—Positron Centers in Defective Ionic Crystals (T)—A. Z. Varisov and E. P. Prokop'ev. 14(2), 493–5(C) (Aug. 1972); CPM-7208E0650

—Positronium Atom in Ionic Crystals with NaCl-Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14(3), 608–12 (Sep. 1972); CPM-7209D0042

—Properties of F'_A Centers in Defect Crystals with Ionic Type Bonding (T)—E. P. Prokop'ev. 14(10), 2520–1 (Apr. 1973); CPM-7304E1166

Pronin, V. P.—Angular Distribution of Inelastically Reflected Electrons (E)—I. M. Bronshtein, V. M. Stozharov and V. P. Pronin. 14(4), 927–30 (Oct. 1972); CPM-7210D0742

Proskuryakov, O. B.—Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-(x+y)}Al_xGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

—Natural Ferromagnetic Resonance in the Garnets $Y_3Fe_{5-x}Al_xO_{12}$ (E/T)—S. A. Poltinnikov, V. P. Polyakov, O. B. Proskuryakov, V. K. Pukhova and V. M. Yudin. 14(3), 777–8(C) (Sep. 1972); CPM-7209D0211

Protogenov, A. P.—Electromagnetic Excitations of Two-Component Plasma in Quantizing Magnetic Fields (T)—V. Ya. Demikhovskii and A. P. Protogenov. 14(7), 1686–94 (Jan. 1973); CPM-7301C0646

Prudius, A. G.—Use of Continuous Fractions to Determine the Carrier Energy in a Magnetic Field (T)—A. G. Prudius. 14(9), 2315–8 (Mar. 1973); CPM-7303E1139

Pudan, L. Ya.—Effect of the Ratio of the Interaction Energies in the First and Second Coordination Spheres on Atomic Ordering in Face-Centered Cubic Solid Solutions (T/E)—N. S. Golosov, L. Ya. Pudan, G. S. Golosova and L. E. Popov. 14(5), 1280–7 (Nov. 1972); CPM-7211A1532

Puga, G. D.—Two-Phonon Absorption in BiOI, BiOBr, and BiOCl Single Crystals (E/T)—G. D. Puga, A. N. Borets, D. M. Bercha and M. V. Shtilikha. 14(7), 1830–1(C) (Jan. 1973); CPM-7301C0790

Pugovkin, A. V.—Nonlinear Interaction of Hypersonic Waves in a $LiNbO_3$ Crystal (E)—A. V. Pugovkin and S. M. Shandarov. 14(1), 201–2(C) (Jul. 1972); CPM-7207D1160

Pukhov, K. K.—Relaxation of Electrons in Dissipative Media (T)—A. P. Bozhko and K. K. Pukhov. 14(7), 1638–44 (Jan. 1973); CPM-7301C0598

Pukhova, V. K.—Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-(x+y)}Al_xGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

—Natural Ferromagnetic Resonance in the Garnets $Y_3Fe_{5-x}Al_xO_{12}$ (E/T)—S. A. Poltinnikov, V. P. Polyakov, O. B. Proskuryakov, V. K. Pukhova and V. M. Yudin. 14(3), 777–8(C) (Sep. 1972); CPM-7209D0211

Pundyk, A. V.—Energy Losses of Fast Electrons Due to the Creation of Excitons in Magnetic Fields (T)—A. E. Glauberman and A. V. Pundyk. 14(10), 2603–4 (Apr. 1973); CPM-7304E1249

Purchinskii, M. S.—Determination of the Mean Free Path of Electrons in Metals (T)—V. P. Naberezhnykh, L. T. Tsymbal and M. S. Purchinskii. 14(2), 431–3 (Aug. 1972); CPM-7208E0588

Pustovalov, V. V.—Behavior of Stress Relaxation During a Superconducting Transition (E)—V. I. Dotsenko, V. V. Pustovalov and V. S. Fomenko. 14(1), 161–4 (Jul. 1972); CPM-7207D1120

Pustovoit, V. I.—Method of Changing and Controlling Optical Properties of Photosemiconductors (T)—R. G. Maev, I. A. Poluéktov and V. I. Pustovoit. 14(7), 1738–44 (Jan. 1973); CPM-7301C0698

—Transverse Acoustoelectric Effect (T/E)—Yu. P. Mukhortov, V. I. Pustovoit, I. S. Ravvin and L. A. Chernozatonskii. 14(9), 2300–4 (Mar. 1973); CPM-7303E1124

Putintsev, Yu. V.—Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

Puzyrev, É. I.—Internal Friction of Aluminum Oxide Ceramics (E)—Yu. S. Balashov, V. N. Batygin, A. A. Sobolev and É. I. Puzyrev. 14(2), 563–4(C) (Aug. 1972); CPM-7208E0720

R

Rabin'kin, A. G.—Structure of the Alloy BiSn under High Pressure (E)—A. A. Boiko, V. F. Degtyareva, E. G. Ponyatovskii and A. G. Rabin'kin. 14(5), 1272–5 (Nov. 1972); CPM-7211A1524

—Pressure-Induced Transition in RbI at Low Temperatures (E)—V. N. Laukhin, A. G. Rabin'kin and É. I. Éstrin. 14(6), 1551–3(C) (Dec. 1972); CPM-7212D0887

—Superconductivity of Films of Nitrides of Several Metals and Alloys Prepared by the Electrothermal Method (E)—Yu. M. Grigor'ev, V. F. Degtyareva, A. G. Merzhanov and A. G. Rabin'kin. 14(10), 2626–7(C) (Apr. 1973); CPM-7304E1272

Rabinovich, R. I.—Interband Transitions and Cyclotron Resonance of Light Holes in Strong Electric Fields (T)—E. M. Gershenzon, Yu. A. Gurvich, É. N. Gusinskii, R. I. Rabinovich and N. V. Soina. 14 (6), 1493–500 (Dec. 1972); CPM-7212D0829

Radautsan, S. I.—Recombination Radiation Involving Participation of Isoelectronic Centers in Antimony-Doped Gallium Phosphide (E)—D. S. Nedzvetskii, S. I. Radautsan and Yu. I. Maksimov. 14 (2), 551–3(C) (Aug. 1972); CPM-7208E0708

Radovanova, E. I.—Additional Lattice Absorption Bands in SiC Polytypes (E)—G. B. Dubrovskii and E. I. Radovanova. 14(8), 2127–8(C) (Feb. 1973); CPM-7302E1253

Radyukhin, V. S.—Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

Radzivil, V. P.—Long-Wavelength Fundamental Absorption Edge of $CdSiP_2$ Crystals (E)—I. S. Gorban', V. V. Lugovskii and V. P. Radzivil. 14(12), 3089–90(C) (Jun. 1973); CPM-7306D0931

Raitsis, V. L.—Magnetostriction of Cerium-Substituted Yttrium Iron Garnets (E)—K. P. Belov, N. V. Volkova, V. I. Raitsis and A. Ya. Chervonenkis. 14(6), 1607–9(C) (Dec. 1972); CPM-7212D0943

Rakhimova, Kh.—Effect of Pressure on Galvanomagnetic Phenomena in Rare Earth Metals (E)—L. I. Vinokurova, E. I. Kondorskii, Kh. Rakhimova and V. Yu. Ivanov. 14(3), 613–9 (Sep. 1972); CPM-7209D0047

—Influence of Pressure on the Hall Effect in Dysprosium Single Crystals (E)—L. I. Vinokurova, E. I. Kondorskii, V. Yu. Ivanov, V. M. Murav'eva and Kh. Rakhimova. 14(12), 2981–4 (Jun. 1973); CPM-7306D0823

Rakhmanina, A. V.—Semimetal–Semiconductor Transition in Bismuth under the Influence of Pressure (E)—V. A. Venttsel' and A. V. Rakhmanina. 14(9), 2325–7 (Mar. 1973); CPM-7303E1149

Rangelov, I. M.—Effect of Electrons on Crystal Structure Formation in Metals (T)—I. M. Rangelov. 14(2), 303–9 (Aug. 1972); CPM-7208E0460

Rashevskaya, E. P.—Absorption Bands of SiC-4H in the Far Infrared (E)—M. A. Il'in and E. P. Rashevskaya. 14(8), 2148–9(C) (Feb. 1973); CPM-7302E1274

Ravich, Yu. I.—Resonance Interaction between Carriers in Polar Semiconductors (T)—Yu. I. Ravich and V. I. Tamarchenko. 14(8), 1945–9 (Feb. 1973); CPM-7302E1071

Ravvin, I. S.—Transverse Acoustoelectric Effect (T/E)—Yu. P. Mukhortov, V. I. Pustovoit, I. S. Ravvin and L. A. Chernozatonskii. 14(9), 2300–4 (Mar. 1973); CPM-7303E1124

Razbirin, B. S.—Exchange Interaction and Zeeman Effect for an Exciton Bound to an Ionized Center in CdSe (T/E)—G. L. Bir, B. S. Razbirin and I. N. Ural'tsev. 14(2), 360–7 (Aug. 1972); CPM-7208E0517

Red'kin, V. S.—Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585

—Characteristic Energy Loss Spectra of Electrons from La, Ce, Pr, and Nd Surfaces (E)—V. V. Zashkvara, E. V. Tsveiman, M. I. Korsunskii and V. S. Red'kin. 14(6), 1564–6(C) (Dec. 1972); CPM-7212D0900

—Interpretation of the Energy-Loss Peaks in the Range 30–70 eV in the Spectra of Electrons Reflected from Transition Metals (E)—V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin and K. Sh. Chokin. 14(7), 1891–2(C) (Jan. 1973); CPM-7301C0851

—Interpretation of Some Features of Plasma Loss Peaks in the Spectra of Electrons Reflected from Mo (E)—V. V. Zashkvara and V. S. Red'kin. 14(9), 2410–1(C) (Mar. 1973); CPM-7303E1234

Regel', A. R.—Damping of Oscillations at the Interface Between the Solid and Liquid Phases of Bismuth by a Magnetic Field (E)—G. V. Komarov, K. A. Melikov, M. D. Petropavlovskii and A. R. Regel'. 14(2), 485–6(C) (Aug. 1972); CPM-7208E0642

—Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14 (4), 971–4 (Oct. 1972); CPM-7210D0786

—Mechanism of Migration and the Hall Effect in Liquid Semiconductors (E/T)—A. A. Andreev, M. Mamadaliev and A. R. Regel'. 14(8), 2060–5 (Feb. 1973); CPM-7302E1186

Regel', V. R.—"Deformation Memory" in Crystals (E/T)—V. G. Govorkov, G. V. Berezhkova, V. R. Regel' and E. P. Kozlovskaya. 14(2), 546(C) (Aug. 1972); CPM-7208E0703

Rekova, L. P.—Changes in the Effect of Oxygen on the Thermionic-Emission Current of K^+ Ions (E)—L. P. Rekova, V. V. Mozgin, O. V. Kisel' and Ya. M. Fogel'. 14(8), 1961–5 (Feb. 1973); CPM-7302E1087

Repnikov, S. P.—Nuclear Magnetic Resonance of V^{51} Nuclei in Vanadium-Rich Fe–V Alloys (E)—S. P. Repnikov and V. B. Ustinov. 14(9), 2375–7(C) (Mar. 1973); CPM-7303E1199

Reshetnikov, N. F.—Collinear Interaction of Elastic and Light Waves in a Lithium Niobate Single Crystal (E)—K. K. Ermilin and N. F. Reshetnikov. 14(7), 1871–3(C) (Jan. 1973); CPM-7301C0831

Reshetnyak, N. B.—Effect of Crystal Lattice Disorder on the Vibrational Spectrum and the Optical States of $CdGeP_2$ (E)—Yu. F. Markov and N. B. Reshetnyak. 14(1), 37–40 (Jul. 1972); CPM-7207D0996

—Combination Scattering Spectra of Crystalline and Vitreous As_2S_3 (E)—Yu. F. Markov and N. B. Reshetnyak. 14(4), 1063–5(C) (Oct. 1972); CPM-7210D0878

Reshina, I. I.—Long-Wave Optical Vibration Spectrum of Vanadium Pentoxide (E)—I. I. Reshina. 14(2), 287–90 (Aug. 1972); CPM-7208E0444

—Mixed Plasmon–Phonon Surface Modes in n-InSb (E/T)—I. I. Reshina, Yu. M. Gerbshtein and D. N. Mirlin. 14(4), 1104–5(C) (Oct. 1972); CPM-7210D0919

Revokatov, O. P.—Spin–Lattice Relaxation of Energy of Dipole–Dipole Reservoir and Slow Motion in Crystalline Beryllium Oxyacetate (E/T)—V. E. Lyapukhov and O. P. Revokatov. 14(2), 502–3(C) (Aug. 1972); CPM-7208E0659

Rez, I. S.—Scattering of Light by Optical Phonons in $Bi_{12}SiO_{20}$ Crystals (E)—B. Kh. Bairamov, I. S. Rez, Z. M. Khashkhozhev and V. I. Tsanev. 14(6), 1473–6 (Dec. 1972); CPM-7212D0809

Reznik, A. M.—Energy Spectra of W^+ and Mo^+ Ions Obtained in the Sputtering of Tungsten–Molybdenum Alloys (E)—A. A. Adylov, V. I. Veksler, A. M. Reznik and S. A. Furer. 14(2), 396–8 (Aug. 1972); CPM-7208E0553

—Angular Dependences of the Energy Spectra of the Ion Component in the Cathodic Sputtering of Polycrystalline Molybdenum with Cs + Ions (E)—A. A. Adylov, V. I. Veksler and A. M. Reznik. 14 (11), 2696–9 (May 1973); CPM-7305D0924

Risbaev, T.—Recombination Radiation from High-Density Exciton Systems in Silicon (E)—B. M. Ashkinadze and T. Risbaev. 14(3), 596–601 (Sep. 1972); CPM-7209D0030

Rode, V. E.—Dependence of High-Field Susceptibility of Iron–Nickel Alloys on Concentration (E)—V. E. Rode and I. B. Krynetskaya. 14(2), 533–4(C) (Aug. 1972); CPM-7208E0690

Rodkina, T. E.—Low-Temperature Absorption of Ultrasound in Ferromagnetic Insulators with Weak Anisotropy (T)—T. E. Rodkina and V. M. Tsukernik. 14(12), 2956–8 (Jun. 1973); CPM-7306D0798

Rogach, E. D.—Photodomain Effect and Deformation in SbSI Single Crystals (E)—A. A. Grekov, R. E. Pasynkov and E. D. Rogach. 14(8), 1919–21 (Feb. 1973); CPM-7302E1045

—Electromechanical Hysteresis and Photodeformation Effect in SbSI Single Crystals (E)—A. A. Grekov, E. D. Rogach and L. N. Syrkin. 14(9), 2396–7(C) (Mar. 1973); CPM-7303E1220

Rogachev, A. A.—Electron–Hole Drops in Germanium (E)—V. M. Asnin, A. A. Rogachev and N. I. Sablina. 14(2), 332–5 (Aug. 1972); CPM-7208E0489

—Energy of Formation of Biexcitons in Silicon (E)—V. M. Asnin, Yu. N. Lomasov and A. A. Rogachev. 14(11), 2921–2(C) (May 1973); CPM-7305D1149

Roi, V. F.—Acoustoelectric Effect in Tellurium (E)—A. P. Korolyuk and V. F. Roi. 14(1), 211–2(C) (Jul. 1972); CPM-7207D1170

Roitburd, A. L.—Nonconservative Motion of Dislocations near Grain Boundaries Which Are Sources or Sinks of Vacancies (T)—A. L. Roitburd and B. A. Vershok. 14(11), 2818–21 (May 1973); CPM-7305D1046

Roitsin, A. B.—Shape of Paramagnetic Resonance Lines in Disordered Systems (T)—M. G. Blazha and A. B. Roitsin. 14(2), 416–20 (Aug. 1972); CPM-7208E0573

—Defect Distribution near a Paramagnetic Center (T/E)—M. G. Blazha, A. A. Bugai, V. M. Maksimenko and A. B. Roitsin. 14(7), 1779–82 (Jan. 1973); CPM-7301C0739

Romanov, N. G.—Off-Center Position of Mn^+ Ions in KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov, N. I. Mel'nikov and N. G. Romanov. 14(7), 1842–3(C) (Jan. 1973); CPM-7301C0802

Romanova, M. V.—Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Klushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

Ronami, G. N.—Distinguishing Features of Magnetic Properties of Single-Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1358

Roslyakov, V. A.—Filamentary Model of a Superconductor in a Porous Material (T)—Yu. Yu. Abramov, L. A. Bol'shov and V. A. Roslyakov. 14(8), 1926–30 (Feb. 1973); CPM-7302E1052

Rovinskii, B. M.—Anomalous Reflection of X Rays (T/E)—B. M. Rovinskii, V. M. Sinaiskii and V. I. Sidenko. 14(2), 340–3 (Aug. 1972); CPM-7208E0497

Rozenbaum, L. B.—Nature of Dissipative Effects Which Accompany Disaccommodation-Type Phenomena in Ferrites and Ferroelectrics (T/E)—L. B. Rozenbaum. 14(1), 196–8(C) (Jul. 1972); CPM-7207D1155

—Hysteresis-Type Amplitude-Dependent Losses in Ferrites (T/E)—L. B. Rozenbaum. 14(4), 1066–8(C) (Oct. 1972); CPM-7210D0881

Rozenberg, V. M.—Influence of Slip and Mechanical Twinning on the Density of Iron (E)—I. A. Gindin, V. M. Rozenberg, Ya. D. Starodubov and L. A. Chirkina. 14(6), 1414–6 (Dec. 1972); CPM-7212D0750

Rozenfel'd, Ya. B.—Profile of the Optical Absorption and Luminescence Bands in Systems Exhibiting the Renner Effect (T) —V. P. Khlopin, B. S. Tsukerblat, Yu. B. Rozenfel'd and I. B. Bersuker. 14(4), 908–14 (Oct. 1972); CPM-7210D0723

—Reduction Factors of Jahn–Teller Systems (T)—V. Z. Polinger, Yu. B. Rozenfel'd, B. S. Tsukerblat and B. G. Vekhter. 14(8), 2165–7 (C) (Feb. 1973); CPM-7302E1291

Rozhanskii, V. N.—Spatial Decoration of Defects in CsI Crystals (E) —N. L. Sizova, M. O. Kliya, V. N. Rozhanskii and A. A. Urusovskaya. 14(3), 743–6 (Sep. 1972); CPM-7209D0177

Rozhavskii, A. S.—Low-Frequency Oscillations in Ferromagnets with Periodic Domain Structure (T)—A. S. Rozhavskii and E. M. Chudnovskii. 14(12), 3108–9(C) (Jun. 1973); CPM-7306D0950

Rozhkina, V. A.—Calculation of the High-Temperature Dependence of Single-Ion Anisotropy Constants (T)—A. A. Kazakov and V. A. Rozhkina. 14(7), 1666–8 (Jan. 1973); CPM-7301C0626

Rozmanyi, O. T.—Effect of Ultrasonic Vibrations on a Crystal's Resistance to Plastic Deformation (E)—I. A. Gindin, I. M. Neklyudov, G. N. Malik and O. T. Rozumnyi. 14(5), 1126–30 (Nov. 1972); CPM-7211A1378

Rubal'skaya, E. V.—Excitation of Magnetoelastic Waves in a Magnesium Spinel Single Crystal (E)—S. A. Mironov, L. Smoczynski, E. V. Rubal'skaya and Yu. M. Yakovlev. 14(6), 1612–4(C) (Dec. 1972); CPM-7212D0948

Ruban, V. A.—Residual Action of High Pressure on the Width of Ferromagnetic Resonance Lines in $Y_3Fe_{5-x}Ga_xO_{12}$ Single Crystals (E)—V. A. Korchin, V. A. Ruban, V. V. Danilov and V. V. Zaporozhets. 14(5), 1329–30(C) (Nov. 1972); CPM-7211A1581

Rubinshtein, E. A.—Weak Turbulence of Coupled Longitudinal Waves in Semiconductors with Ionic Lattices (T)—E. A. Rubinshtein. 14(8), 2002–5 (Feb. 1973); CPM-7302E1128

Rubtsov, V. N.—Photoconductivity of Yttrium Ferrite Garnet (E)—V. V. Eremenko, A. P. Kirichenko, V. N. Rubtsov and V. S. Smirnov. 14(4), 1057–8 (Oct. 1972); CPM-7210D0872

Rudchik, A. T.—Form of Exciton Absorption Bands of CdS Single Crystals at T=4.2°K (E)—M. I. Strashnikova and A. T. Rudchik. 14(4), 845–8 (Oct. 1972); CPM-7210D0660

Rudenko, A. I.—Passage of a Space-Charge-Limited Current Pulse through a Solid in the Presence of Traps (T)—A. I. Rudenko. 14 (11), 2706–9 (May 1973); CPM-7305D0934

Rudenko, M. I.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Rudenko, O. V.—Influence of Placing Dislocations at Starting Positions on the Kinetics of Dislocation Motion in NaCl Crystals (E)—V. A. Makara, N. N. Novikov and O. V. Rudenko. 14(1), 261–3(C) (Jul. 1972); CPM-7207D1220

Rudenko, T. S.—Experimental Investigation of the Frequency Dependence of Photoelectric Emission from Metals (E)—S. D. Babenko, T. S. Rudenko, V. A. Benderskii and Ya. M. Zolotovitskii. 14(12), 2950–2 (Jun. 1973); CPM-7306D0792

Rudyak, V. M.—Barkhausen Jumps and Stabilization of the Spontaneous Polarization of Single Crystals of $BaTiO_3$ (E)—V. M. Rudyak, A. Yu. Kudzin and T. V. Panchenko. 14(8), 2112–3(C) (Feb. 1973); CPM-7302E1238

—Relationship between Illumination-Induced Multiple Domains in SbSI Crystals and Elements of the Hysteresis Loop (E)—V. M. Rudyak, A. A. Bogomolov and V. V. Ivanov. 14(9), 2390–2(C) (Mar. 1973); CPM-7303E1214

—Relationship between the Barkhausen Effect and the State of Defects in Ferroelectric Semiconductor SbSI (E)—V. M. Rudyak, A. A. Bogomolov, V. V. Ivanov and A. I. Yanter. 14(10), 2646–7 (C) (Apr. 1973); CPM-7304E1292

Rukavishnikov, V. A.—Optical Phonons in a System of $Zn_xCd_{1-x}Te$ Mixed Crystals (E)—L. K. Vodop'yanov, E. A. Vinogradov, A. M. Blinov and V. A. Rukavishnikov. 14(1), 219–20(C) (Jul. 1972); CPM-7207D1178

Rukhadze, A. A.—Excitation of Longitudinal Electromagnetic Waves by an Electron Beam in the Plasma of a Solid (T)—R. R. Kikvidze, V. G. Kotetishvili and A. A. Rukhadze. 14(1), 146–8 (Jul. 1972); CPM-7207D1105

—Emission Intensity from a Solid–State Plasma with Development of the Bunch Instability (T)—R. R. Kikvidze, V. G. Kotetishvili and A. A. Rukhadze. 14(8), 1931–4 (Feb. 1973); CPM-7302E1057

Rukin, E. I.—Anomalous Behavior of the Dielectric Nonlinearity Coefficient in Strontium Titanate near the Phase Transition at 110°K (E)—I. M. Buzin, I. V. Ivanov, E. I. Rukin and V. F. Chuprakov. 14(7), 1770–3 (Jan. 1973); CPM-7301C0730

Rusakov, A. P.—Elastic Constants of ZnSe (E)—V. I. Kuskov, A. P. Rusakov and A. N. Mentser. 14(7), 1869–70(C) (Jan. 1973); CPM-7301C0829

Ryabka, P. M.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Ryazanov, M. I.—Origin of Oriented Maxima in the Bremsstrahlung Spectra of Nonrelativistic Electrons in a Single Crystal (T)—N. P. Kalashnikov, É. A. Koptelov and M. I. Ryazanov. 14(4), 1033–4 (Oct. 1972); CPM-7210D0848

Rybinskii, O. A.—Spin–Wave Resonance in Thin Single–Crystal Films of Manganese Ferrite (E)—B. D. Ivanov, B. A. Kalinikos, O. A. Rybinskii and D. N. Chartorizhskii. 14(2), 561–2(C) (Aug. 1972); CPM-7208E0718

—Permittivity Tensor of Manganese Ferrite in the Visible Range of Wavelengths (T/E)—A. V. Malakhovskii, I. S. Édel'man and O. A. Rybinskii. 14(6), 1462–6 (Dec. 1972); CPM-7212D0798

Rychkova, S. V.—Influence of Structure Defects on the Electrical Properties and Luminescence of α–SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206

Ryskov, V. M.—Intensity of Induced Mandelstam–Brillouin Scattering in Glasses (E)—V. M. Ryskov and V. I. Korotkov. 14 (7), 1645–8 (Jan. 1973); CPM-7301C0605

Ryskin, A. I.—Spectrum of Co^{2+} Ion in ZnS–Co and Al Crystals Grown from the Melt (E)—A. I. Ryskin, L. A. Sysoev and G. I. Khil'ko. 14(3), 779–80(C) (Sep. 1972); CPM-7209D0213

—Electron Structure of Ion–Hole Complexes Attached to Ni Ions in ZnS Crystals (E)—S. A. Kazanskii and A. I. Ryskin. 14(6), 1571–2 (C) (Dec. 1972); CPM-7212D0907

Ryzhii, V. I.—Microwave–Induced Anisotropy of Conductivity of Semiconductors in Quantizing Magnetic Fields (T)—V. I. Ryzhii. 14(1), 27–9 (Jul. 1972); CPM-7207D0986

—Photoconductivity of Semiconductors in Strong Magnetic Fields (T)—A. D. Malov and V. I. Ryzhii. 14(7), 1766–9 (Jan. 1973); CPM-7301C0726

Ryzhikov, I. V.—Influence of Structure Defects on the Electrical Properties and Luminescence of α–SiC (E)—V. M. Al'tshuller, E. A. Belousova, I. I. Kruglov, V. I. Pavlichenko, I. V. Ryzhikov and S. V. Rychkova. 14(1), 247–8(C) (Jul. 1972); CPM-7207D1206

Ryzhikov, V. D.—Nonmonotonic Conductivity Dependence of the Sound Amplification Threshold in Piezoelectric Semiconductors (E/T)—B. L. Timan, V. D. Ryzhikov and V. K. Komar'. 14(3), 668–70 (Sep. 1972); CPM-7209D0102

S

Sabin, V. I.—Positron Annihilation in Certain Transition Metal Hydrides (E)—V. I. Sabin, R. A. Andrievskii, V. V. Gorbachev and A. D. Tsyganov. 14(11), 2815–7 (May 1973); CPM-7305D1043

Sablina, N. I.—Electron–Hole Drops in Germanium (E)—V. M. Asnin, A. A. Rogachev and N. I. Sablina. 14(2), 332–5 (Aug. 1972); CPM-7208E0489

Safarov, V. I.—Indirect Phononless Optical Transitions in Mixed Germanium–Silicon Crystals (E/T)—V. I. Safarov and A. N. Titkov. 14(2), 380–3 (Aug. 1972); CPM-7208E0537

Sagalovich, N. E.—Coalescence in Two–Phase Alloys (T/E)—E. P. Nechiporenko, V. V. Slezov, V. V. Sagalovich, N. E. Sagalovich and V. L. Khrebtov. 14(5), 1259–63 (Nov. 1972); CPM-7211A1511

Sagalovich, V. V.—Coalescence in Two–Phase Alloys (T/E)—E. P. Nechiporenko, V. V. Slezov, V. V. Sagalovich, N. E. Sagalovich and V. L. Khrebtov. 14(5), 1259–63 (Nov. 1972); CPM-7211A1511

Saikin, K. S.—Orientational Quadrupolar Relaxation in NMR Crystals (T)—Yu. L. Popov, N. K. Gaisin, F. I. Bashirov, K. S. Saikin and R. A. Dautov. 14(5), 1199–202 (Nov. 1972); CPM-7211A1451

Sakhnenko, V. P.—Theory of Phase Transitions in Boracites (T)—Yu. M. Gufan and V. P. Sakhnenko. 14(7), 1660–5 (Jan. 1973); CPM-7301C0620

Saka, T. Ya.—Surface Electronic States in a KCl Crystal (T)—S. G. Zavt and T. Ya. Saks. 14(10), 2502–4 (Apr. 1973); CPM-7304E1148

Saksonov, Yu. G.—Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Sakun, V. P.—Kinetics of Energy Transfer in a Crystal (T)—V. P. Sakun. 14(8), 1906–14 (Feb. 1973); CPM-7302E1032

Salanskii, N. M.—Spin–Wave Spectrum in Films Having a Band Periodic Domain Structure (T)—N. M. Salanskii and M. Sh. Erukhimov. 14(2), 511–3(C) (Aug. 1972); CPM-7208E0668

Salikhov, K. M.—Spin–Lattice Relaxation of Hydrogen Atoms and Paramagnetic Ions in Sulfuric Acid Vitreous Aqueous Solutions at 77°K (E/T)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1915–8 (Feb. 1973); CPM-7302E1041

—Spin Diffusion and Spin–Lattice Relaxation Kinetics of Hydrogen Atoms in Glassy Matrices at 77°K (T/E)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1956–60 (Feb. 1973); CPM-7302E1082

Sal'nikov, A. N.—Specific Heat of $KMnF_3$ (E)—V. G. Khlyustov, I. N. Flerov, A. T. Silin and A. N. Sal'nikov. 14(1), 139–41 (Jul. 1972); CPM-7207D1098

Salugin, A. N.—Mössbauer Spectroscopic Investigation of the Structure of Layered Compounds of Graphite and Iron (E)—R. A. Stukan, Yu. N. Novikov, V. A. Povitskii and A. N. Salugin. 14 (11), 2914–5(C) (May 1973); CPM-7305D1142

Samartsev, V. V.—Photon Echo in Ruby (E)—U. Kh. Kopvillem, V. R. Nagibarov, V. A. Pirozhkov, V. V. Samartsev and R. G. Usmanov. 14(6), 1544–5(C) (Dec. 1972); CPM-7212D0880

Samchenko, Yu. I.—Light Emission from $BaTiO_3$ Crystals Subjected to Uniaxial Stress Pulses (E)—S. A. Flerova and Yu. I. Samchenko. 14(2), 498–9(C) (Aug. 1972); CPM-7208E0655

—Emission of Light from $BaTiO_3$ Crystals During Phase Transitions (E)—S. A. Flerova and Yu. I. Samchenko. 14(9), 2406–7(C) (Mar. 1973); CPM-7303E1230

Samoilova, T. V.—Mechanical Properties and Dislocation Structure of Alkali Halide Crystals in Single Slip (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(2), 487–9(C) (Aug. 1972); CPM-7208E0644

—Influence of a Dislocation Forest on the Parameters of the Dislocation Structure of Slip Bands in LiF Crystals (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(6), 1585–7(C) (Dec. 1972); CPM-7212D0921

Samokhvalov, A. A.—Nonmetal–Metal Transition in $Eu_{1-x}Gd_xO$ (E)—A. A. Samokhvalov, B. A. Gizhevskii, M. I. Simonova and N. I. Solin. 14(1), 230–1(C) (Jul. 1972); CPM-7207D1189

—Reflection of $Eu_{1-x}Gd_xO$ Single Crystals in the Visible and Infrared Spectra (E/T)—A. A. Samokhvalov, G. P. Skornyakov, N. N. Loshkareva, G. V. B. Birkle, M. I. Simonova and T. P. Chukina. 14(5), 1177–80 (Nov. 1972); CPM-7211A1429

—Exchange Narrowing of Paramagnetic Resonance Line in Chromium Chalcogenide Spinels (E)—A. A. Samokhvalov, V. S. Babushkin, M. I. Simonova and T. I. Arbuzova. 14(7), 1883–4(C) (Jan. 1973); CPM-7301C0843

Samorukov, S. B.—Self–Interaction of Finite–Amplitude Magnetoelastic Waves (E)—Dao Tkhu Nguyen, V. A. Krasil'nikov, S. B. Samorukov and V. I. Uchastkin. 14(10), 2632–3(C) (Apr. 1973); CPM-7304E1278

Samulionis, V. I.—Acoustic Investigations of Sb_2S_3 Crystals (E)—I. P. Grigas, V. F. Kunigelis, A. S. Orlyukas and V. I. Samulionis. 14 (3), 796–7(C) (Sep. 1972); CPM-7209D0230

Sankin, V. I.—Exciton Electroabsorption in 6H SiC (E)—G. B. Dubrovskii and V. I. Sankin. 14(4), 1024–6 (Oct. 1972); CPM-7210D0839

Sannikov, D. G.—Surface Electromagnetic Waves in a Uniaxial Crystal (T)—V. N. Lyubimov and D. G. Sannikov. 14(3), 575–9 (Sep. 1972); CPM-7209D0009

Sarsev, Yu. N.—Influence of Additions of Ag, In, and Pt on the Transport Effects in Bismuth—Antimony Alloys (E)—G. A. Ivanov, Yu. N. Sarsev and V. I. Korishev. 14(2), 539–40(C) (Aug. 1972); CPM-7208E0696

Sarnatskii, V. M.—Acoustic Saturation and Amplification of Na^{23} NMR Lines in $NaNO_3$ Crystals (E/T)—V. M. Sarnatskii and V. A. Shutilov. 14(3), 649–54 (Sep. 1972); CPM-7209D0083

Sasovskaya, I. L.—Optical Properties of Copper–Nickel Alloys in the Visible and Ultraviolet Regions of the Spectrum (E)—I. I. Sasovskaya and M. M. Noskov. 14(4), 857–9 (Oct. 1972); CPM-7210D0672

Satpaev, K. K.—Mössbauer Effect in Impurity Atoms of Fe^{57} in Quartz Single Crystals (E)—M. F. Vereshchak, A. K. Zhetbaev, D. K. Kaipov and K. K. Satpaev. 14(10), 2638–9(C) (Apr. 1973); CPM-7304E1284

Savchenko, É. A.—Luminescence of Single Crystals of the Ferroelectric Semiconductor SbSI (E)—M. K. Sheinkman, N. M. Krolevets, É. A. Savchenko and L. N. Tatarenko. 14(1), 253–4(C) (Jul. 1972); CPM-7207D1212

Savchenko, I. B.—Kinetics of the Photoplastic Effect and Its Dependence on Orientation (E)—Yu. A. Osip'yan and I. B. Savchenko. 14(7), 1723–5 (Jan. 1973); CPM-7301C0683

Savenko, V. I.—Electromechanical Effect on Ionic Crystals (E)—N. V. Zagoruiko, V. I. Savenko and N. N. Bekkauer. 14(8), 2120–2 (C) (Feb. 1973); CPM-7302E1246

Savin, É. P.—Mössbauer Effect in I^{129} Impurity Atoms in $A^{III}{}_2Te_3$, $A^{III}Te$, $A^{V}{}_2Te_3$ Crystals (E)—P. P. Seregin and É. P. Savin. 14(6), 1548–50(C) (Dec. 1972); CPM-7212D0884

Savin, S. V.—Effect of Form of Inelastic Deformation on Intermolecular Reaction in Polymers (E/T)—V. A. Bershtein, N. A. Kalinina, S. V. Savin and V. A. Stepanov. 14(4), 975–7 (Oct. 1972); CPM-7210D0790

Savinkov, A. L.—Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

Savost'yanova, N. V.—Study of the Processes of Deactivation of the Metastable State of Excited Nd^{3+} Ions in LaF_3 Crystals (E)—Yu. K. Voron'ko, V. V. Osiko, N. V. Savost'yanova, V. S. Fedorov and I. A. Shcherbakov. 14(9), 2294–9 (Mar. 1973); CPM-7303E1118

Sedov, V. L.—Curie Point for Inclusions of Nickel in Synthetic Diamonds (E)—V. L. Sedov and R. A. Alikhanov. 14(4), 997–9 (Oct. 1972); CPM-7210D0812

Segal, V. M.—Change of Work Function of an Electron in a Thermoelastic Martensitic Reaction (E)—R. I. Mints, V. P. Melekhin, V. M. Segal and I. Yu. Ievlev. 14(8), 2153–4(C) (Feb. 1973); CPM-7302E1279

Seleznev, V. N.—Magnetic and Magnetoelastic Properties of $FeBO_3$ Single Crystals (E)—A. M. Kadomtseva, R. Z. Levitin, Yu. F. Popov, V. N. Seleznev and V. V. Uskov. 14(1), 172–4 (Jul. 1972); CPM-7207D1131

—Optical Properties of $FeBO_3$ in the Strong Absorption Region (E)—I. S. Édel'man, A. V. Malakhovskii, T. I. Vasil'eva and V. N. Seleznev. 14(9), 2442–4(C) (Mar. 1973); CPM-7303E1266

—ESR Spectrum of Cr^{3+} Ions in $LiGa_5O_8$ at Low Temperatures (E)—A. Yu. Kozhukhar', V. N. Seleznev, G. A. Tsintsadze and V. A. Shapovalov. 14(11), 2892–3(C) (May 1973); CPM-7305D1120

Sel'kin, A. V.—Spectroscopic Observation of the Lifetime of Free Excitons (T/E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1193–8 (Nov. 1972); CPM-7211A1445

—Kinetics of Bound–Exciton Formation in CdS Crystals (E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1331–2(C) (Nov. 1972); CPM-7211A1583

—Effects of Spatial Dispersion in the Reflection Spectra of Crystals Obtained for Oblique Incidence of Light (T/E)—S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(12), 3051–6 (Jun. 1973); CPM-7306D0893

Semak, D. G.—Domain Structure and Local States in SbSI Type Semiconductor—Ferroelectrics (T)—D. M. Bercha, A. A. Kikineshi, D. G. Semak and D. V. Chepur. 14(5), 1359–60(C) (Nov. 1972); CPM-7211A1611

Semenenko, V. I.—Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

Semenova, E. D.—Dynamics of Vibrations of Sn^{119} Nuclei in Dilute Tin–Base Alloys (E)—V. V. Chekin, A. I. Velikodnyi, S. N. Glushko and E. D. Semenova. 14(2), 479–80(C) (Aug. 1972); CPM-7208E0636

Sementsov, D. I.—Effect of Angular Dispersion of Anisotropy on the Ferromagnetic Resonance Linewidth in Thin Films (T/E)—D. I. Sementsov and Yu. V. Kornev. 14(6), 1431–3 (Dec. 1972); CPM-7212D0767

Semushkin, G. B.—Kinetics of Decrease in the Concentration of Nonequilibrium Cation Vacancies in KBr:Ba^{2+} Crystals (E)—G. A. Andreev, L. G. Buritskova and G. B. Semushkin. 14(10), 2640–1 (C) (Apr. 1973); CPM-7304E1286

Senchukov, F. D.—Deformation Luminescence of KCl:Ag Crystals (E)—I. A. Markova-Osorgina, F. D. Senchukov and S. Z. Shmurak. 14(5), 1236–8 (Nov. 1972); CPM-7211A1488

—Flashes of Luminescence on Unloading Plastically Deformed Alkali Halide Crystals (E)—F. D. Senchukov and S. Z. Shmurak. 14(5), 1336–7(C) (Nov. 1972); CPM-7211A1588

Serbinov, I. A.—Switching Effect in Pyrolytic VO_2 Films (E)—A. G. Zhdan, A. S. Darevskii, M. E. Chugunova and I. A. Serbinov. 14(7), 1879–80(C) (Jan. 1973); CPM-7301C0839

Serdobol'skaya, O. Yu.—Nonlinear Effects in the Propagation of Sound in a Ferroelectric Close to the Phase Transition (E)—O. Yu. Serdobol'skaya and Kuak Tkhi Tam. 14(8), 2114–5(C) (Feb. 1973); CPM-7302E1240

Serdyuk, A. S.—Forbidden Transitions in Degenerate Spin Systems (E/T)—B. F. Alekseev and A. S. Serdyuk. 14(6), 1535–6(C) (Dec. 1972); CPM-7212D0871

Seregin, P. P.—Investigation of the Effects of the Glass—Crystal Transition on the Local Surroundings of Sn^{119} Impurity Atoms in As_2Te_3 and in As_2Se_3-As_2Te_3 Based on the Mössbauer Effect (E)—P. P. Seregin and L. N. Vasil'ev. 14(5), 1325–6(C) (Nov. 1972); CPM-7211A1577

—Mössbauer Effect in I^{129} Impurity Atoms in $A^{III}{}_2Te_3$, $A^{III}Te$, $A^{V}{}_2Te_3$ Crystals (E)—P. P. Seregin and É. P. Savin. 14(6), 1548–50(C) (Dec. 1972); CPM-7212D0884

—Mössbauer Effect at Sn^{119} Impurity Atoms in Gallium in Porous Glass (E)—V. N. Bogomolov, N. A. Klushin and P. P. Seregin. 14(7), 1729–31 (Jan. 1973); CPM-7301C0689

Sereika, A. P.—Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, É. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

Sergeev, V. P.—Thermal Expansion of ZnSe in the Temperature Range 100–600°K (E)—V. V. Zhdanova and V. P. Sergeev. 14(7), 1859–61(C) (Jan. 1973); CPM-7301C0819

Sergeeva, G. G.—Spin—Lattice Relaxation in a Solid Dielectric Containing Paramagnetic Defects (T)—G. G. Sergeeva. 14(5), 1294–6 (Nov. 1972); CPM-7211A1546

Sergeeva, V. M.—Thermal Conductivity of the Me_3X_4 Chalcogenides of Rare Earth Elements (E/T)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(3), 720–4 (Sep. 1972); CPM-7209D0154

—Thermal Conductivity of the La_2Te_3–La_3Te_4 System (E)—I. A. Smirnov, L. S. Parfen'eva and V. M. Sergeeva. 14(4), 899–901 (Oct. 1972); CPM-7210D0714

—Thermal Conductivity of Polymeric Modifications of Nd_2S_3 (E)—I. A. Smirnov, L. S. Parfen'eva, V. M. Sergeeva and T. B. Zhukova. 14(8), 2142–3(C) (Feb. 1973); CPM-7302E1268

—Thermal Conductivity of Sm_3S_4 (E)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(9), 2412–3(C) (Mar. 1973); CPM-7303E1236

Sevost'yanov, M. A.—Vacuum–Evaporated Ferroelectric Barium Titanate Thinner Than 1000 Å (E)—Yu. Ya. Tomashpol'skii and M. A. Sevost'yanov. 14(9), 2319–21 (Mar. 1973); CPM-7303E1143

Shabel'nikov, L. G.—Observation of the Domain Structure in KDP by Low–Temperature X–Ray Photography Using a Widely Diverging Beam (E)—V. Sh. Shekhtman, L. G. Shabel'nikov, I. M. Shmyt'ko and S. Kh. Aknazarov. 14(11), 2690–3 (May 1973); CPM-7305D0918

Shadchin, E. A.—Spectral Theory of the Transfer of Excitations in a System of Two–Level Centers (T)—V. S. Mashkevich and E. A. Shadchin. 14(3), 716–9 (Sep. 1972); CPM-7209D0150

Shadrin, E. B.—Excitation of Exciton States in ZnS Crystals Containing Stacking Faults (E)—L. G. Suslina and E. B. Shadrin. 14(1), 243–4(C) (Jul. 1972); CPM-7207D1202

—Exciton Spectrum of Photoconductivity in Zinc Sulfide Crystals (E)—A. V. Il'inskii, B. V. Novikov, L. G. Suslina and E. B. Shadrin. 14(7), 1673–7 (Jan. 1973); CPM-7301C0633

Shakhmuratova, L. N.—Effect of Coherent Sound Vibrations on γ–γ Angular Correlation (T)—U. Kh. Kopvillem and L. N. Shakhmuratova. 14(8), 2125–6(C) (Feb. 1973); CPM-7302E1251

Shakhovtsov, V. I.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Shakin, O. V.—Light Scattering by Elastic Waves in Uniaxial Crystals (T/E)—V. V. Lemanov and O. V. Shakin. 14(1), 184–9 (Jul. 1972); CPM-7207D1143

—Investigation of High-Frequency Acoustic Harmonics in Alkaline-Earth Metal Fluorides by Means of Braff Light Scattering (E/T)—O. V. Shakin and V. V. Lemanov. 14(5), 1189–92 (Nov. 1972); CPM-7211A1441

—Erratum: Photoelastic Constants of Alkaline Earth Fluorides [13, 3142 (1972,12)] (E)—O. V. Shakin, M. F. Bryzhina and V. V. Lemanov. 14(5), 1370 (Nov. 1972); CPM-7211A1622

Shakmanov, V. V.—Microstructure of Domains and Domain Walls in Single-Crystal Films of Barium Titanate (E)—S. I. Yakunin, V. V. Shakmanov, G. V. Spivak and N. V. Vasil'eva. 14(2), 310–3 (Aug. 1972); CPM-7208E0467

Shalyt, S. S.—Galvanomagnetic and Thermomagnetic Effects in p-Type InSb (E)—P. V. Tamarin, S. S. Shalyt, I. G. Lang and S. T. Pavlov. 14(1), 47–57 (Jul. 1972); CPM-7207D1006

Shandarov, S. M.—Nonlinear Interaction of Hypersonic Waves in a $LiNbO_3$ Crystal (E)—A. V. Pugovkin and S. M. Shandarov. 14(1), 201–2(C) (Jul. 1972); CPM-7207D1160

Shantsev, I. P.—Nonlinear Magnetoelastic Phenomena in Ferromagnetic Resonance (T)—I. P. Shantsev and V. E. Shapiro. 14(1), 175–7 (Jul. 1972); CPM-7207D1134

Shapiro, B. I.—Effect of Drift on Thermal Fluctuations of the Electromagnetic Field (T)—A. M. Konin and B. I. Shapiro. 14(8), 1966–8 (Feb. 1973); CPM-7302E1092

Shapiro, R. Kh.—Spectrum of Surface Electromagnetic Waves in Ferromagnet-Semiconductor Structures (T)—R. Kh. Shapiro. 14 (11), 2737–9 (May 1973); CPM-7305D0965

Shapiro, V. E.—Nonlinear Magnetoelastic Phenomena in Ferromagnetic Resonance (T)—I. P. Shantsev and V. E. Shapiro. 14(1), 175–7 (Jul. 1972); CPM-7207D1134

Shapovalov, V. A.—ESR Spectrum of Cr^{3+} Ions in $LiGa_5O_8$ at Low Temperatures (E)—A. Yu. Kozhukhar', V. N. Seleznev, G. A. Tsintsadze and V. A. Shapovalov. 14(11), 2892–3(C) (May 1973); CPM-7305D1120

Sharipov, R. Z.—Electron-Spin Echo from Cr^{3+} in Laser Ruby (T/E)—U. Kh. Kopvillem, B. P. Smolyakov and R. Z. Sharipov. 14 (5), 1239–40 (Nov. 1972); CPM-7211A1491

Sharlai, B. M.—Temperature Dependence of the Components of the Thermal Expansion Tensor α_{ik} of Gallium (E)—E. I. Geshko, V. P. Mikhal'chenko and B. M. Sharlai. 14(6), 1554–5(C) (Dec. 1972); CPM-7212D0890

Shaskol'skaya, M. P.—Decompostion of Impurity Associations in Lithium Fluroide Single Crystals (E)—A. A. Blistanov, A. N. Pavlov and M. P. Shaskol'skaya. 14(4), 1051–2(C) (Oct. 1972); CPM-7210D0866

—Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

—Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Shatrukov, L. F.—Profile of the ESR Line of Localized Spins in Metals (T/E)—T. S. Al'tshuler, I. A. Garifullin, E. G. Kharakhash'yan and L. F. Shatrukov. 14(9), 2213–6 (Mar. 1973); CPM-7303E1037

Shavrov, V. G.—Anisotropy of the Spin Wave Excitation Threshold (T)—P. I. Nabokin and V. G. Shavrov. 14(2), 434–6 (Aug. 1972); CPM-7208E0591

Shchedrin, M. I.—Phase Transition in Irradiated Gadolinium Molybdate (E)—V. V. Dem'yanov and M. I. Shchedrin. 14(10), 2620–1(C) (Apr. 1973); CPM-7304E1266

Shchedrina, N. V.—Frequency and Temperature Dependences of the Complex Dielectric Constant of Ferroelectrics near the Curie Point (T)—A. P. Levanyuk and N. V. Shchedrina. 14(4), 1027–32 (Oct. 1972); CPM-7210D0842

—Fluctuation Absorption of Sound near the Curie Points of Ferroelectrics That Become Piezoelectric in the Paraelectric Phase (T)—A. P. Levanyuk and N. V. Shchedrina. 14(10), 2581–4 (Apr. 1973); CPM-7304E1227

Shcheglov, V. I.—Interaction of Surface Magnetostatic Waves with Elastic Rayleigh Waves in Cubic Ferromagnets (T)—V. I. Shcheglov. 14(6), 1417–20 (Dec. 1972); CPM-7212D0753

—Magnetic Field Dependence of the Velocity of Sound in Ferromagnets and Antiferromagnets (T/E)—V. I. Shcheglov. 14(7), 1889–90(C) (Jan. 1973); CPM-7301C0849

Shchelokov, R. N.—Temperature Broadening and Shift of Phononless Lines in Luminescence Spectra of Crystals of Uranyl Compounds (E/T)—R. N. Shchelokov, Yu. I. Krasilov and V. E. Karasev. 14 (7), 1885–6(C) (Jan. 1973); CPM-7301C0845

Shchemelev, V. N.—X-Ray Induced Electron Emission from Perfect Germanium Single Crystals Under (111) Bragg Reflection Conditions (E)—V. N. Shchemelev and M. V. Kruglov. 14(12), 2988–91 (Jun. 1973); CPM-7306D0830

Shcherbakov, I. A.—Study of the Processes of Deactivation of the Metastable State of Excited Nd^{3+} Ions in LaF_3 Crystals (E)—Yu. K. Voron'ko, V. V. Osiko, N. V. Savost'yanova, V. S. Fedorov and I. A. Shcherbakov. 14(9), 2294–9 (Mar. 1973); CPM-7303E1118

Shchetinin, M. P.—Quantum Efficiency in Semiconductors with Kane-Type Band Structure (T)—N. S. Baryshev, K. Ya. Shtivel'man and M. P. Shchetinin. 14(9), 2344–7 (Mar. 1973); CPM-7303E1168

Sheikhet, E. G.—Anomalous Transmission of X Rays by Silicon Single Crystals Containing Dislocations (E)—E. G. Sheikhet, O. N. Efimov and N. V. Veselovskaya. 14(1), 223–4(C) (Jul. 1972); CPM-7207D1182

—Photoelectric Absorption and Diffuse Scattering in the Anomalous Transmission of X Rays in Ge Crystals (T)—E. G. Sheikhet and O. N. Efimov. 14(3), 625–7 (Sep. 1972); CPM-7209D0059

Sheinkman, M. K.—Influence of Nonequilibrium Carriers on the Domain Structure of the Ferroelectric Semiconductor SbSI (E)—B. S. Agaronov, N. M. Bezdetnyi, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(1), 205–6(C) (Jul. 1972); CPM-7207D1164

—Luminescence of Single Crystals of the Ferroelectric Semiconductor SbSI (E)—M. K. Sheinkman, N. M. Krolevets, E. A. Savchenko and L. N. Tatarenko. 14(1), 253–4(C) (Jul. 1972); CPM-7207D1212

—Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634

—Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

Shekhmamet'ev, R. I.—Fine Structure of the Bielectron or Bihole Energy Levels in BiI_3 Crystals (E)—E. F. Gross, N. V. Starostin, M. P. Shepilov and R. I. Shekhmamet'ev. 14(7), 1681–5 (Jan. 1973); CPM-7301C0641

—Effect of Uniaxial Deformation on the Absorption Spectrum of Bismuth Iodide Crystals (E)—E. F. Gross, D. L. Fedorov and R. I. Shekhmamet'ev. 14(11), 2767–9 (May 1973); CPM-7305D0995

Shekhtman, V. L.—Summation of Electron Excitations in Fluorite-Type Crystals Activated by Er^{3+} Ions (T)—V. B. Kirii and V. L. Shekhtman. 14(10), 2559–63 (Apr. 1973); CPM-7304E1205

Shekhtman, V. Sh.—Observation of the Domain Structure in KDP by Low-Temperature X-Ray Photography Using a Widely Diverging Beam (E)—V. Sh. Shekhtman, L. G. Shabel'nikov, I. M. Shmyt'ko and S. Kh. Aknazarov. 14(11), 2690–3 (May 1973); CPM-7305D0918

Shelykh, A. I.—Electrical Conductivity of Vanadium Oxide Bronzes in the Liquid and Solid States (E)—A. A. Vinogradov, A. A. Andreev and A. I. Shelykh. 14(4), 1077–9(C) (Oct. 1972); CPM-7210D0892

Shemyakov, A. A.—NMR Study of Spin Reorientation in the Weak Ferromagnet $ErFeO_3$ (E/T)—N. M. Kovtun, A. S. Karnachev, E. E. Solov'ev, A. Ya. Chervonenkis and A. A. Shemyakov. 14(7), 1856–8(C) (Jan. 1973); CPM-7301C0816

—NMR Investigation of Electron Ordering in Magnetite (E)—N. M. Kovtun, E. E. Solov'ev and A. A. Shemyakov. 14(9), 2430–1(C) (Mar. 1973); CPM-7303E1254

Shenderovskii, V. A.—Charge Density Fluctuations in Many-Valley Semiconductors in Strong Electric Fields (T)—A. A. Chumak and V. A. Shenderovskii. 14(5), 1291–3 (Nov. 1972); CPM-7211A1543

Shenyavskaya, L. A.—Memory of Semiconductor Crystals and Photoepitaxy (E)—G. I. Distler and L. A. Shenyavskaya. 14(5), 1203–6 (Nov. 1972); CPM-7211A1455

Shepel', L. G.—Carrier Recombination in GaAs when Carriers are Generated in the Vicinity of the Surface (E/T)—G. P. Peka and L. G. Shepel'. 14(8), 2025–30 (Feb. 1973); CPM-7302E1151

—Impurity Recombination Radiation Excited in GaAs by Strongly Absorbed Radiation (E/T)—G. P. Peka, N. L. Dmitruk and L. G. Shepel'. 14(11), 2866–9 (May 1973); CPM-7305D1094

Shepilov, M. P.—Fine Structure of the Bielectron or Bihole Energy Levels in BiI_3 Crystals (E)—E. F. Gross, N. V. Starostin, M. P. Shepilov and R. I. Shekhmamet'ev. 14(7), 1681–5 (Jan. 1973); CPM-7301C0641

Shepilov, N. A.—Character of Electron–Nuclear Interactions in Metal–Hydrogen Systems Based on Transition Metals of Group IVb (E/T)—E. F. Khodosov and N. A. Shepilov. 14(3), 807–8(C) (Sep. 1972); CPM-7209D0241

Shepilov, V. B.—Investigation of the Dislocation Structure of Stretch-Deformed Copper Whiskers by Analysis of Lattice Disorientations (E)—V. S. Postnikov, A. M. Belikov, A. T. Kosilov and V. B. Shepilov. 14(6), 1529–30(C) (Dec. 1972); CPM-7212D0865

Sher, É. M.—Electrical Conductivity and Thermal EMF of Finely Dispersed Reduced Rutile (TiO_2) (E)—V. N. Bogomolov and É. M. Sher. 14(3), 567–9 (Sep. 1972); CPM-7209D0001

Sherle, A. I.—Thermal Conductivity of Ion–Radical Salts of Tetracyanoquinodimethane (E)—A. V. Petrov, Yu. G. Nurullaev, R. M. Vlasova, V. V. Kuzina and A. I. Sherle. 14(6), 1594–5(C) (Dec. 1972); CPM-7212D0930

Shevchenko, V. V.—Magnetic Properties of Small Nickel Aerosol Particles in the 4.2–300°K Range (E/T)—A. E. Petrov, V. I. Petinov and V. V. Shevchenko. 14(10), 2595–8 (Apr. 1973); CPM-7304E1241

Shevchenko, Yu. B.—Temperature Variation of EPR Line Splitting of Cr^{3+} in $ZnWO_4$ by an External Electric Field (E/T)—A. A. Bugai, O. G. Duliu, V. M. Maksimenko and Yu. B. Shevchenko. 14(2), 475–6(C) (Aug. 1972); CPM-7208E0632

Sheveleva, A. S.—Relaxation Phenomena in Additively Colored KBr Crystals (E)—N. G. D'yachenko, A. V. Tyurin and A. S. Sheveleva. 14(10), 2648–9(C) (Apr. 1973); CPM-7304E1294

Shik, A. Ya.—Influence of a Constant Electric Field on Cyclotron Waves (T)—L. É. Gurevich and A. Ya. Shik. 14(1), 58–61 (Jul. 1972); CPM-7207D1017

Shileika, A. Yu.—Form of the Electroreflection Spectrum in InP (E)—Yu. F. Kavalyauskas and A. Yu. Shileika. 14(4), 915–9 (Oct. 1972); CPM-7210D0730

Shilyaev, A. A.—Electrical Conductivity of Some Amorphous and Crystalline Polymers in Strong Electric Fields (E)—A. A. Shilyaev and L. G. Gindin. 14(4), 1094–5(C) (Oct. 1972); CPM-7210D0909

Shindich, V. L.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Shipatov, É. T.—Influence of Channeling on the Scintillation Efficiency of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(1), 209–10(C) (Jul. 1972); CPM-7207D1168

—Orientational Dependence of the Scintillation Yield of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(4), 1073–4(C) (Oct. 1972); CPM-7210D0888

Shipko, M. N.—Effect of Number of Fe^{3+} Exchange Linkages on Local Magnetic Fields at Fe^{57} Nuclei in the System $YFe_{1-x}Al_xO_3$ (E/T)—V. F. Belov, T. A. Khimich, M. N. Shipko and M. I. Dakhis. 14(2), 437–40 (Aug. 1972); CPM-7208E0594

Shiryaeva, O. I.—Influence of Induced Anisotropy on Ferromagnetic Resonance Curves of Fe–Si Alloys (E)—O. I. Shiryaeva, I. E. Startseva and Ya. S. Shur. 14(11), 2779–80 (May 1973); CPM-7305D1007

Shitikov, A. V.—Theory of Ferromagnetic Resonance in Single Crystals with Anisotropic g Factor (T)—N. F. Balakhonov, L. V. Kurbatov and A. V. Shitikov. 14(1), 101–5 (Jul. 1972); CPM-7207D1060

Shitikova, G. F.—Effect of Dimensional Factors on Slip and Hardening of Silicon Iron Single Crystals (E)—L. G. Orlov and G. F. Shitikova. 14(2), 507–8(C) (Aug. 1972); CPM-7208E0664

Shivrin, O. N.—X-Ray Diffraction Study of Local Order in the MgO—ZnO System (E)—S. A. Chudinova and O. N. Shivrin. 14(5), 1297–301 (Nov. 1972); CPM-7211A1549

—Diffuse Scattering of X Rays by Polycrystalline Aggregates Containing Dislocation Loops of Small Radius (T)—I. A. Malinenko and O. N. Shivrin. 14(10), 2599–600 (Apr. 1973); CPM-7304E1245

Shlenkin, V. I.—Compensation of the Excess Charge During Activation of Scheelites with Rare-Earth Ions (E)—R. Yu. Abdulsabirov, A. A. Antipin, I. N. Kurkin, E. A. Tsvetkov, Yu. K. Chirkin and V. I. Shlenkin. 14(1), 255–7(C) (Jul. 1972); CPM-7207D1214

—Spin–Lattice Relaxation of Mo^{5+} Ions in $LaNbO_4$ Single Crystals (E)—I. N. Kurkin, Yu. K. Chirkin and V. I. Shlenkin. 14(9), 2348–51 (Mar. 1973); CPM-7303E1172

Shlyakhina, L. P.—Magnetic Properties of Mixed Orthoferrite Chromites (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, T. M. Ledneva, M. M. Lykina, T. L. Ovchinnikova and L. P. Shlyakhina. 14(3), 813–5(C) (Sep. 1972); CPM-7209D0247

Shlyakhtenko, P. G.—Spectral Investigation of Auto–Photoemission from CdS Single Crystals under Pulsed and Constant Voltage Conditions (E)—B. V. Novikov, A. E. Cherednichenko and P. G. Shlyakhtenko. 14(1), 14–7 (Jul. 1972); CPM-7207D0973

—Connection Between Electrical Breakdown and the Form of the Volt—Ampere Characteristics of the Autoemission Current From p–Ge (E)—P. G. Shlyakhtenko, R. Z. Bakhtizin and N. V. Mileshkina. 14(5), 1320–2(C) (Nov. 1972); CPM-7211A1572

Shmidt, V. A.—Negative Creep During Bending of Boron–Doped Silicon (E)—V. A. Shmidt. 14(12), 3077(C) (Jun. 1973); CPM-7306D0919

Shmiglyuk, M. I.—Influence of a Homogeneous Static Electric Field on the Γ^+_5 Exciton Quadrupole Transition in Cu_2O (T/E)—M. I. Shmiglyuk. 14(3), 696–701 (Sep. 1972); CPM-7209D0130

Shmol'berg, A. A.—Experimental Investigation and Calculation of the X-Ray Diffraction Contrast of a Single Dislocation (E/T)—V. I. Polovinkina, É. V. Suvorov, F. N. Chukhovskii and A. A. Shmol'berg. 14(7), 1699–702 (Jan. 1973); CPM-7301C0659

Shmurak, S. Z.—Deformation Luminescence of KCl.Ag Crystals (E)—I. A. Markova-Osorgina, F. D. Senchukov and S. Z. Shmurak. 14(5), 1236–8 (Nov. 1972); CPM-7211A1488

—Flashes of Luminescence on Unloading Plastically Deformed Alkali Halide Crystals (E)—F. D. Senchukov and S. Z. Shmurak. 14(5), 1336–7(C) (Nov. 1972); CPM-7211A1588

Shmuratov, É. A.—Switching Effect in Molten Oxides Sb_2O_3 and B_2O_3 (E)—A. A. Andreev, S. D. Zainutdinov, B. T. Melekh, T. Turgunov and E. A. Shmuratov. 14(12), 3102–3(C) (Jun. 1973); CPM-7306D0944

Shmyt'ko, I. M.—Observation of the Domain Structure in KDP by Low-Temperature X-Ray Photography Using a Widely Diverging Beam (E)—V. Sh. Shekhtman, L. G. Shabel'nikov, I. M. Shmyt'ko and S. Kh. Aknazarov. 14(11), 2690–3 (May 1973); CPM-7305D0918

Shtilikha, M. V.—Photoemission Studies of Oxyhalide Crystals of Bismuth (E)—V. M. Bentsa, M. V. Shtilikha, D. V. Chepur, Yu. Yu. Kampi and V. V. Matyashevskii. 14(3), 671–3 (Sep. 1972); CPM-7209D0105

—Heat Conductivity of Crystals of Bismuth Oxyhalides (E)—M. V. Shtilikha and D. V. Chepur. 14(5), 1354–5(C) (Nov. 1972); CPM-7211A1606

—Two-Phonon Absorption in BiOI, BiOBr, and BiOCl Single Crystals (E/T)—G. D. Puga, A. N. Borets, D. M. Bercha and M. V. Shtilikha. 14(7), 1830–1(C) (Jan. 1973); CPM-7301C0790

Shtivel'man, K. Ya.—Quantum Efficiency in Semiconductors with Kane-Type Band Structure (T)—N. S. Baryshev, K. Ya. Shtivel'man and M. P. Shchetinin. 14(9), 2344–7 (Mar. 1973); CPM-7303E1168

Shukhalov, E. I.—Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

Shulakov, A. S.—New X-Ray Emission Bands of Sn, Sc, Re, and Os in the Wavelength Range 90–900 Å (E)—A. S. Shulakov, V. A. Fomichev and T. M. Zimkina. 14(10), 2644–5(C) (Apr. 1973); CPM-7304E1290

Shul'man, L. A.—Exchange Broadening of the Hyperfine Components of the ESR Spectrum of Nitrogen in Diamond (E/T)—L. A. Shul'man and G. A. Podzyarei. 14(6), 1521–6 (Dec. 1972); CPM-7212D0857

Shul'pina, I. L.—Defects in Semiconducting Silicon Carbide Crystals (E)—A. S. Tregubova and I. L. Shul'pina. 14(9), 2305–8 (Mar. 1973); CPM-7303E1129

—Structural Imperfections of Diffusion–Doped SiC(6H) Layers (E)—A. S. Tregubova, E. N. Mokhov and I. L. Shul'pina. 14(12), 3061–3 (Jun. 1973); CPM-7306D0903

Shumilova, L. N.—Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

—Frequency Dispersion of the Electrical Conductivity of Liquid Selenium and Selenium–Tellurium Alloys (E)—A. A. Andreev, A. L. Manukyan, A. B. Pevtsov and L. N. Shumilova. 14(12), 3100–1 (C) (Jun. 1973); CPM-7306D0942

Shumskaya, L. S.—Second–Harmonic Generation in Lithium Niobate (E/T)—L. I. Ivleva, Yu. S. Kuz'minov and L. S. Shumskaya. 14 (11), 2686–9 (May 1973); CPM-7305D0914

Shunin, G. E.—Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

Shuppe, G. N.—Anisotropic Surface Structure Change in Refractory Metal Crystals During Directional Transport Processes (E/T)—I. V. Zakurdaev, E. Ya. Chernyak, G. N. Shuppe and V. N. Yakovlev. 14(12), 2977–80 (Jun. 1973); CPM-7306D0819

Shur, Ya. S.—Influence of Induced Anisotropy on Ferromagnetic Resonance Curves of Fe–Si Alloys (E)—O. I. Shiryaeva, I. E. Startseva and Ya. S. Shur. 14(11), 2779–80 (May 1973); CPM-7305D1007

Shutilov, V. A.—Acoustic Saturation and Amplification of Na^{23} NMR Lines in $NaNO_3$ Crystals (E/T)—V. M. Sarnatskii and V. A. Shutilov. 14(3), 649–54 (Sep. 1972); CPM-7209D0083

—Temperature Dependence of the Absorption of Ultrasound in $LiIO_3$ Crystals (E)—A. A. Abramovich, V. A. Shutilov, T. D. Levitskaya, B. I. Kidyarov and P. L. Mitnitskii. 14(9), 2237–42 (Mar. 1973); CPM-7303E1061

Shutov, B. M.—Impurity Absorption of Infrared Radiation in n–Type SiC(6H) (E)—O. V. Vakulenko, O. A. Govorova and B. M. Shutov. 14(1), 242(C) (Jul. 1972); CPM-7207D1201

Shveitser, I. G.—Experimental Confirmation of Certain Many–Electron Processes (E)—M. A. Blokhin, E. G. Orlova and I. G. Shveitser. 14(8), 2146–7(C) (Feb. 1973); CPM-7302E1272

Sidenko, V. I.—Anomalous Reflection of X Rays (T/E)—B. M. Rovinskii, V. M. Sinaiskii and V. I. Sidenko. 14(2), 340–3 (Aug. 1972); CPM-7208E0497

Sidokhin, E. F.—Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

—Slip Polygonization in Silicon Iron Single Crystals Deformed by Tensile Forces (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(4), 1075–6(C) (Oct. 1972); CPM-7210D0890

—Polygonization by Slip in Silicon Iron Single Crystals Deformed by Tension at −196°C (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(8), 2110–1(C) (Feb. 1973); CPM-7302E1236

—X–Ray Diffraction Investigation of the Substructure of Iron Microcrystals (E)—I. P. Kushnir and E. F. Sidokhin. 14(8), 2129–30(C) (Feb. 1973); CPM-7302E1255

Sigal, M. A.—Ferromagnetic Resonance in Unsaturated Crystals of Magnetoplumbite (E)—M. A. Sigal and V. P. Cherevko. 14(1), 30–6 (Jul. 1972); CPM-7207D0989

—Anisotropy of the Above–Threshold Susceptibility of Yttrium Iron Garnet under Parallel Pumping Conditions (E)—M. A. Sigal. 14 (1), 234–5(C) (Jul. 1972); CPM-7207D1193

Sigalov, B. L.—Electrooptic Effect in Vanadium Pentoxide Single Crystals below the Fundamental Absorption Edge (E/T)—V. G. Mokerov and B. L. Sigalov. 14(11), 2875–9 (May 1973); CPM-7305D1103

Silin, A. T.—Specific Heat of $KMnF_3$ (E)—V. G. Khlyustov, I. N. Flerov, A. T. Silin and A. N. Sal'nikov. 14(1), 139–41 (Jul. 1972); CPM-7207D1098

Silkin, N. I.—Magnetic Properties of Ti^{3+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682

—ESR of Hg^+ Ions in K_2SO_4 Crystals (E)—V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(10), 2642–3(C) (Apr. 1973); CPM-7304E1288

Simashko, S. G.—Velocity of Slip Bands with Respect to the (100) [110] and (110) [110] Systems in Sodium Chloride Crystals (E)—O. V. Klyavin, S. G. Simashko and A. V. Stepanov. 14(1), 130–5 (Jul. 1972); CPM-7207D1089

Simonova, M. I.—Nonmetal–Metal Transition in $Eu_{1-x}Gd_xO$ (E)—A. A. Samokhvalov, B. A. Gizhevskii, M. I. Simonova and N. I. Solin. 14(1), 230–1(C) (Jul. 1972); CPM-7207D1189

—Reflection of $Eu_{1-x}Gd_xO$ Single Crystals in the Visible and Infrared Spectra (E/T)—A. A. Samokhvalov, G. P. Skornyakov, N. N. Loshkareva, G. V. B. Birkle, M. I. Simonova and T. P. Chukina. 14(5), 1177–80 (Nov. 1972); CPM-7211A1429

—Exchange Narrowing of Paramagnetic Resonance Line in Chromium Chalcogenide Spinels (E)—A. A. Samokhvalov, V. S. Babushkin, M. I. Simonova and T. I. Arbuzova. 14(7), 1883–4(C) (Jan. 1973); CPM-7301C0843

Sinaiskii, V. M.—Anomalous Reflection of X Rays (T/E)—B. M. Rovinskii, V. M. Sinaiskii and V. I. Sidenko. 14(2), 340–3 (Aug. 1972); CPM-7208E0497

Sindeev, Yu. G.—Determination of the Effective Charge of Ions from the Spectra of the Raman Scattering of Light by Polaritons (T/E)—Yu. G. Sindeev. 14(12), 3110–1(C) (Jun. 1973); CPM-7306D0952

Sinel'nikov, B. Ya.—Some Features of a Magnetic Transition in Chromium Telluride (E)—A. A. Galkin, Z. A. Zavadskii and B. Ya. Sinel'nikov. 14(1), 125–9 (Jul. 1972); CPM-7207D1084

Sinitsyn, E. V.—Magnetic Interactions in Rare–Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2198–203 (Mar. 1973); CPM-7303E1022

—Parameters of the Crystal Field in Rare–Earth Orthoferrites (T)—A. S. Moskvin and E. V. Sinitsyn. 14(9), 2363–4(C) (Mar. 1973); CPM-7303E1187

Sinyavov, E. V.—Piezoelectric Properties of Polarized $BaTiO_3$ Ceramics Subjected to Uniaxial Transverse Compression (E)—E. V. Sinyavov, A. I. Gavrilishina and S. A. Flerova. 14(5), 1302–3 (C) (Nov. 1972); CPM-7211A1554

—Antiparallel Switching in a–Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(7), 1844–5(C) (Jan. 1973); CPM-7301C0804

—Features of Lateral Motion in a–Domain Barium Titanate Crystals (E)—V. M. Duda, E. F. Dudnik and E. V. Sinyakov. 14(8), 2057–9 (Feb. 1973); CPM-7302E1183

—Critical Field in Polycrystalline Solid Solutions Based on $BaTiO_3$ (E)—E. V. Sinyakov, A. I. Gavrilishina, E. A. Astrelina and S. A. Flerova. 14(11), 2905–6(C) (May 1973); CPM-7305D1133

Sinyavskii, É. P.—Light Absorption by a Crystal Subjected to an Intense Laser Bias (T)—É. P. Sinyavskii and V. A. Kovarskii. 14 (7), 1846–7(C) (Jan. 1973); CPM-7301C0806

Sinyavskii, V. I.—Magnetic Sublattices in Nonstoichiometric Manganese–Zinc Ferrites (E)—Sh. Sh. Bashkirov, A. B. Liberman and V. I. Sinyavskii. 14(11), 2776–8 (May 1973); CPM-7305D1004

Sizova, N. L.—Spatial Decoration of Defects in CsI Crystals (E)—N. L. Sizova, M. O. Kliya, V. N. Rozhanskii and A. A. Urusovskaya. 14(3), 743–6 (Sep. 1972); CPM-7209D0177

Skal, A. S.—Landau Levels in the Valence Band of Tellurium (T)—M. S. Bresler, A. S. Skal and É. B. Sonin. 14(1), 165–71 (Jul. 1972); CPM-7207D1124

Skidanenko, V. I.—Coupled Spin Waves and the Magnon—Magnon Resonance in Antiferromagnets (T)—V. A. Popov and V. I. Skidanenko. 14(2), 421–7 (Aug. 1972); CPM-7208E0578

Skirda, A. S.—Impurity Absorption Spectra of Silicon Carbide in the Near Infrared Region (E)—I. S. Gorban', Yu. A. Marazuev and A. S. Skirda. 14(3), 664–7 (Sep. 1972); CPM-7209D0098

—Photoionization Spectra of Impurity Centers in α SiC(6H) at High Temperatures (E)—I. S. Gorban', V. P. Zavada and A. S. Skirda. 14(10), 2652–3(C) (Apr. 1973); CPM-7304E1298

Skornyakov, G. P.—Reflection of $Eu_{1-x}Gd_xO$ Single Crystals in the Visible and Infrared Spectra (E/T)—A. A. Samokhvalov, G. P. Skornyakov, N. N. Loshkareva, G. V. B. Birkle, M. I. Simonova and T. P. Chukina. 14(5), 1177–80 (Nov. 1972); CPM-7211A1429

Skrebnev, V. A.—Shape of the Cross Relaxation Curve (T)—V. A. Skrebnev. 14(8), 1993–5 (Feb. 1973); CPM-7302E1119

Skryabinskii, I. V.—Temperature Dependence of Infrared Dispersion of Lattice Reflection in GaSb (E/T)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(11), 2838–40 (May 1973); CPM-7305D1066

—Multiphonon Absorption in Gallium Antimonide (E)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(12), 3041–3 (Jun. 1973); CPM-7306D0883

Slezov, V. V.—Kinetics of the Formation of the Isometric Form of Extraneous Inclusions in Crystals (T)—Ya. E. Geguzin, A. S. Dzyuba and V. V. Slezov. 14(2), 391–5 (Aug. 1972); CPM-7208E0548

—Coalescence in Two-Phase Alloys (T/E)—E. P. Nechiporenko, V. V. Slezov, V. V. Sagalovich, N. E. Sagalovich and V. L. Khrebtov. 14(5), 1259–63 (Nov. 1972); CPM-7211A1511

Slivinskaya, A. T.—Anomalous Change of Polar Kerr Effect in Nickel and Iron in a Strong Magnetic Field (E/T)—I. S. Edel'man, A. V. Malakhovskii, T. P. Morozova, A. T. Slivinskaya and G. S. Veisig. 14(11), 2770–2 (May 1973); CPM-7305D0998

Slivinskii, A. P.—Group-Theoretic Classification of the States of Pairs of Impurity Ions Having an Unfilled and a Filled d Shell (T)—Yu. A. Kudenko and A. P. Slivinskii. 14(11), 2670–1 (May 1973); CPM-7305D0898

Slobodyanik, V. M.—Ferromagnetic Resonance in Plastically Deformed Permalloy and Iron (E)—E. F. Kondrat'ev, V. G. Pinchuk and V. M. Slobodyanik. 14(5), 1352–3(C) (Nov. 1972); CPM-7211A1604

Slutsker, A. I.—Kinetics of the Formation of Submicroscopic Cracks in Polymers Under Load (E)—M. A. Gezalov, V. S. Kuksenko and A. I. Slutsker. 14(2), 344–8 (Aug. 1972); CPM-7208E0501

—Accelerating Effect of Ultraviolet Radiation on Submicroscopic Crack Formation in Loaded Polymers (E)—Kh. Akimbekov, V. S. Kuksenko, S. Nizamidinov, A. I. Slutsker and A. A. Yastrebinskii. 14(9), 2339–43 (Mar. 1973); CPM-7303E1163

Smirnov, A. P.—Stability Boundary of the Superconducting State in a Type I Superconductor (E)—A. P. Smirnov and V. N. Totubalin. 14(8), 2066–8 (Feb. 1973); CPM-7302E1192

—Low-Frequency Absorption in the Mixed State of Type II Superconductors (E/T)—A. P. Smirnov and V. N. Totubalin. 14(8), 2150–2(C) (Feb. 1973); CPM-7302E1276

Smirnov, B. I.—Mechanical Properties and Dislocation Structure of Alkali Halide Crystals in Single Slip (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(2), 487–9(C) (Aug. 1972); CPM-7208E0644

—Influence of a Dislocation Forest on the Parameters of the Dislocation Structure of Slip Bands in LiF Crystals (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(6), 1585–7(C) (Dec. 1972); CPM-7212D0921

Smirnov, I. A.—Transport Coefficients of NiS in a Phase Transition Region (E)—A. A. Andreev, I. A. Smirnov, L. S. Parfen'eva and L. N. Shumilova. 14(3), 706–9 (Sep. 1972); CPM-7209D0140

—Thermal Conductivity of the Me_2X_3 Chalcogenides of Rare Earth Elements (E/T)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(3), 720–4 (Sep. 1972); CPM-7209D0154

—Elastic Wave Damping in Cubic Crystals According to the Akhiezer Mechanism (E)—V. Ya Avdonin, V. V. Lemanov, I. A. Smirnov and V. V. Tikhonov. 14(3), 747–52 (Sep. 1972); CPM-7209D0181

—Thermal Conductivity of the La_2Te_3–La_3Te_4 System (E)—I. A. Smirnov, L. S. Parfen'eva and V. M. Sergeeva. 14(4), 899–901 (Oct. 1972); CPM-7210D0714

—Thermal Conductivity of Polymeric Modifications of Nd_2S_3 (E)—I. A. Smirnov, L. S. Parfen'eva, V. M. Sergeeva and T. B. Zhukova. 14(8), 2142–3(C) (Feb. 1973); CPM-7302E1268

—Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Klushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

—Thermal Conductivity of Sm_3S_4 (E)—I. A. Smirnov, L. S. Parfen'eva, V. Ya. Khusnutdinova and V. M. Sergeeva. 14(9), 2412–3(C) (Mar. 1973); CPM-7303E1236

Smirnov, S. A.—Emission of Activated Hydrogen and Hydrogen Peroxide from Freshly Treated Surfaces of Solids (E)—V. V. Mitrofanov, S. A. Smirnov and V. A. Fogel'. 14(3), 781–2(C) (Sep. 1972); CPM-7209D0215

Smirnov, V. S.—Photoconductivity of Yttrium Ferrite Garnet (E)—V. V. Eremenko, A. P. Kirichenko, V. N. Rubtsov and V. S. Smirnov. 14(4), 1057–8 (Oct. 1972); CPM-7210D0872

Smirnova, O. I.—Calorimetric Study of the Recrystallization and Reorganization Processes of Crystallites of a Polymer (E)—I. V. Sochava, G. I. Tsereteli and O. I. Smirnova. 14(2), 460–6 (Aug. 1972); CPM-7208E0617

Smirnova, T. P.—Breakdown in p-Type Ge Field Emitters (E)—V. G. Ivanov and T. P. Smirnova. 14(10), 2624–5(C) (Apr. 1973); CPM-7304E1270

Smirnovskaya, E. I.—Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Smoczynski, L.—Excitation of Magnetoelastic Waves in a Magnesium Spinel Single Crystal (E)—S. A. Mironov, L. Smoczynski, E. V. Rubal'skaya and Yu. M. Yakovlev. 14(6), 1612–4(C) (Dec. 1972); CPM-7212D0948

Smokotin, E. M.—Magnetoelastic Coupling of Fe^{3+} Ions in Yttrium Iron Garnet (E/T)—E. A. Petrakovskaya and E. M. Smokotin. 14(11), 2888–9(C) (May 1973); CPM-7305D1116

Smolenskii, G. A.—Nuclear Magnetic Resonance and Weak Ferromagnetism in $FeBO_3$ (E)—M. P. Petrov, G. A. Smolenskii, A. P. Paugurt, S. A. Kizhaev and M. K. Chizhov. 14(1), 87–91 (Jul. 1972); CPM-7207D1046

—Interaction of Transverse Elastic Waves with Spin Waves in the Uniaxial Ferromagnet RbNiF$_3$ (E/T)—A. N. Grishmanovskii, V. V. Lemanov, G. A. Smolenskii and P. P. Syrnikov. 14(8), 2050–2 (Feb. 1973); CPM-7302E1176

Smolin, M. D.—State of Nickel Atoms in a Nickel–Chromium Alloy (E)—D. F. Kalinovich, I. I. Kovenskii and M. D. Smolin. 14(12), 3098–9(C) (Jun. 1973); CPM-7306D0940

Smolyakov, B. P.—Electron–Spin Echo from Cr^{3+} Ions in Laser Ruby (T/E)—U. Kh. Kopvillem, B. P. Smolyakov and R. Z. Sharipov. 14(5), 1239–40 (Nov. 1972); CPM-7211A1491

Sobolev, A. A.—Internal Friction of Aluminum Oxide Ceramics (E)—Yu. S. Balashov, V. N. Batygin, A. A. Sobolev and É. I. Puzyrev. 14(2), 563–4(C) (Aug. 1972); CPM-7208E0720

Sochava, I. V.—Calorimetric Study of the Recrystallization and Reorganization Processes of Crystallites of a Polymer (E)—I. V. Sochava, G. I. Tsereteli and O. I. Smirnova. 14(2), 460–6 (Aug. 1972); CPM-7208E0617

Sofronova, S. Yu.—Effect of Mechanical Stress on the Shapes of Dislocation Etch Pits in Silicon (E)—V. A. Mal'tseva, B. D. Platonov, S. Yu. Sofronova and Ya. M. Bekker. 14(4), 1053–4(C) (Oct. 1972); CPM-7210D0868

Soina, N. V.—Interband Transitions and Cyclotron Resonance of Light Holes in Strong Electric Fields (T)—E. M. Gershenzon, Yu. A. Gurvich, É. N. Gusinskii, R. I. Rabinovich and N. V. Soina. 14(6), 1493–500 (Dec. 1972); CPM-7212D0829

Sokolov, L. D.—Densities of Quantum States for the Elements and Their Compressibilities (T)—Yu. V. Zheltov and L. D. Sokolov. 14(11), 2784–6 (May 1973); CPM-7305D1012

Sokolov, N. S.—Bound Exciton Luminescence in Germanium Crystals (E)—E. F. Gross, B. V. Novikov and N. S. Sokolov. 14(2), 368–71 (Aug. 1972); CPM-7208E0525

—Zero-Phonon Radiative Annihilation of Indirect Excitons in Germanium Crystals with Isoelectronic Substitutional Impurities (T)—E. F. Gross, N. S. Sokolov and A. N. Titkov. 14(7), 1732–4 (Jan. 1973); CPM-7301C0692

Sokolov, V. I.—Linear Electrooptical Effect in Gallium Selenide (E)—V. I. Sokolov and V. K. Subashiev. 14(1), 178–83 (Jul. 1972); CPM-7207D1137

Sokolov, V. N.—Conditions Governing Bipolar Thermodiffusion in Semiconducting Liquids (T/E)—B. M. Mogilevskii, V. N. Sokolov and A. F. Chudnovskii. 14(10), 2531–4 (Apr. 1973); CPM-7304E1177

—Thermal Conductivity of Molten Tellurium–Selenium Alloys (E)—B. M. Mogilevskii, V. N. Sokolov and A. F. Chudnovskii. 14(10), 2658–60(C) (Apr. 1973); CPM-7304E1304

Sokolov, V. V.—Raman Scattering by Size-Quantization Levels (T)—V. N. Genkin and V. V. Sokolov. 14(4), 1080–2(C) (Oct. 1972); CPM-7210D0895

Solin, N. I.—Nonmetal–Metal Transition in $Eu_{1-x}Gd_xO$ (E)—A. A. Samokhvalov, B. A. Gizhevskii, M. I. Simonova and N. I. Solin. 14(1), 230–1(C) (Jul. 1972); CPM-7207D1189

Sologub, V. V.—Some Features of the Valence Band of Bi_2Te_3 (E)—V. V. Sologub, A. D. Goletskaya and R. V. Parfen'ev. 14(3), 783–4 (C) (Sep. 1972); CPM-7209D0217

Solovarov, N. K.—Concentration Dependences of the Intensities of Electric-Dipole Induction and Echo (T)—O. N. Gadomskii, V. R. Nagibarov and N. K. Solovarov. 14(9), 2428–9(C) (Mar. 1973); CPM-7303E1252

Solov'ev, E. E.—NMR Study of Spin Reorientation in the Weak Ferromagnet $ErFeO_3$ (E/T)—N. M. Kovtun, A. S. Karnachev, E. E. Solov'ev, A. Ya. Chervonenkis and A. A. Shemyakov. 14(7), 1856–8(C) (Jan. 1973); CPM-7301C0816

—NMR Investigation of Electron Ordering in Magnetite (E)—N. M. Kovtun, E. E. Solov'ev and A. A. Shemyakov. 14(9), 2430–1(C) (Mar. 1973); CPM-7303E1254

Solov'ev, K. S.—Structure of Small-Angle Torsion Boundaries in the (001) Plane (E)—V. S. Postnikov, K. S. Solov'ev, V. M. Ievlev, I. V. Zolotukhin and Yu. K. Netusov. 14(5), 1311–2(C) (Nov. 1972); CPM-7211A1563

Solov'eva, E. V.—Effect of the Type and Concentration of Structural Point Defects on the Electrophysical Properties of Undoped Gallium Arsenide (E/T)—E. V. Solov'eva, V. V. Karataev, M. G. Mil'vidskii, V. B. Osvenskii and O. G. Stolyarov. 14(2), 441–4 (Aug. 1972); CPM-7208E0598

Sonin, É. B.—Landau Levels in the Valence Band of Tellurium (T)—M. S. Bresler, A. S. Skal and É. B. Sonin. 14(1), 165–71 (Jul. 1972); CPM-7207D1124

Soroka, G. M.—Exciton States in a Fluorobenzene Crystal (E)—G. V. Klimusheva and G. M. Soroka. 14(3), 794–5(C) (Sep. 1972); CPM-7209D0228

Sorokin, G. A.—Absorption of Surface Acoustic Waves in Superconductors (T)—G. A. Sorokin. 14(11), 2683–5 (May 1973); CPM-7305D0911

—Absorption of Rayleigh Acoustic Waves in Metals in Magnetic Fields (T)—R. G. Mints and G. A. Sorokin. 14(12), 3032–6 (Jun. 1973); CPM-7306D0874

Sorokin, L. M.—Nucleation of Vacuum-Deposited Au on Thermal Oxides of Si (E)—V. I. Prokhorov, L. M. Sorokin and V. S. Chernyak. 14(5), 1323–4(C) (Nov. 1972); CPM-7211A1575

Spivak, G. V.—Microstructure of Domains and Domain Walls in Single-Crystal Films of Barium Titanate (E)—S. I. Yakunin, V. V. Shakmanov, G. V. Spivak and N. V. Vasil'eva. 14(2), 310–3 (Aug. 1972); CPM-7208E0467

Spol'nik, A. I.—Configuration of a Macroscopic Pileup of Twinning Dislocations in a Crystal (E)—V. S. Boiko, R. I. Garber, L. F. Krivenko, A. I. Spol'nik and L. I. Fedorova. 14(6), 1408–13 (Dec. 1972); CPM-7212D0744

Spol'nik, Z. A.—Interaction of Neutrons and Light with Magnetoacoustic Waves in Crystals Having a Ferromagnetic–Antiferromagnetic Transition (T)—A. É. Ginzburg, L. N. Davydov and Z. A. Spol'nik. 14(7), 1774–8 (Jan. 1973); CPM-7301C0734

Stafeev, V. I.—Investigation of the Diffusion of Impurities in Mercury Telluride (E)—F. A. Zaitov, V. I. Stafeev and G. S. Khodakov. 14(10), 2628–9(C) (Apr. 1973); CPM-7304E1274

Stambol'skaya, L. M.—Influence of an Electric Field on the Parameters of Impurity Centers in Al_2O_3 (E)—V. V. Mikho, A. P. Fedchuk and L. M. Stambol'skaya. 14(10), 2665–6(C) (Apr. 1973); CPM-7304E1311

Stanishevskaya, S. P.—Broadening of a Ferromagnetic Resonance Line by Chemical Magnetic Inhomogeneities (E)—A. A. Manuilova, V. E. Zuev, S. P. Stanishevskaya and V. Ya. Dubossarskaya. 14(9), 2365–6(C) (Mar. 1973); CPM-7303E1189

Stankevich, V. G.—Relaxation of Mössbauer Spectra of $DyVO_4$ (E)—V. D. Gorobchenko, I. I. Lukashevich, V. G. Stankevich, E. V. Mel'nikov and N. I. Filippov. 14(8), 2140–1(C) (Feb. 1973); CPM-7302E1266

Starikov, M. A.—Magnetic Susceptibility of Holmium Near the Néel Point (E)—L. A. Boyarskii and M. A. Starikov. 14(6), 1588–9(C) (Dec. 1972); CPM-7212D0924

Starodubov, Ya. D.—Influence of Slip and Mechanical Twinning on the Density of Iron (E)—I. A. Gindin, V. M. Rozenberg, Ya. D. Starodubov and L. A. Chirkina. 14(6), 1414–6 (Dec. 1972); CPM-7212D0750

—Change in the Electrical Resistivity of Lead after Creep in the Normal and Superconducting States (E)—I. A. Gindin, V. P. Lebedev and Ya. D. Starodubov. 14(7), 1748–51 (Jan. 1973); CPM-7301C0708

Starostin, N. V.—Fine Structure of the Bielectron or Bihole Energy Levels in BiI_3 Crystals (E)—E. F. Gross, N. V. Starostin, M. P. Shepilov and R. I. Shekhmamet'ev. 14(7), 1681–5 (Jan. 1973); CPM-7301C0641

Starostina, L. S.—Paramagnetic Ions of Gd^{3+} and Mn^{2+} in an ScF_3 Crystal (E)—L. S. Starostina, B. N. Grechushnikov and V. F. Koryagin. 14(12), 2936–8 (Jun. 1973); CPM-7306D0778

Starov, É. N.—Temperature Dependence of Carrier Mobility in Barium Titanate (E/T)—É. V. Bursian, Ya. G. Girshberg and É. N. Starov. 14(4), 872–5 (Oct. 1972); CPM-7210D0687

Startsev, V. I.—Amplitude-Dependent Internal Friction in Superconducting and Normal Indium (E)—V. Ya. Platkov, L. N. Polunina and V. I. Startsev. 14(9), 2400–1(C) (Mar. 1973); CPM-7303E1224

Startseva, I. E.—Influence of Induced Anisotropy on Ferromagnetic Resonance Curves of Fe–Si Alloys (E)—O. I. Shiryaeva, I. E. Startseva and Ya. S. Shur. 14(11), 2779–80 (May 1973); CPM-7305D1007

Stefanovskii, E. P.—Theory of Intermediate States in Antiferromagnets (T)—V. G. Bar'yakhtar, V. F. Klepikov, V. A. Popov and E. P. Stefanovskii. 14(4), 955–9 (Oct. 1972); CPM-7210D0770

Stel'makh, V. F.—Hybridization of the Atomic Orbitals at Structural Defects in Si (T)—A. N. Zhevno, V. F. Stel'makh and V. D. Tkachev. 14(4), 1007–11 (Oct. 1972); CPM-7210D0822

Stepanov, A. A.—Some Features of the Damage of Calcite Crystals Caused by Laser Radiation (E)—R. I. Garber, E. I. Stepina and A. A. Stepanov. 14(1), 194–5(C) (Jul. 1972); CPM-7207D1153

Stepanov, A. V.—Velocity of Slip Bands with Respect to the (100) [110] and (110) [110] Systems in Sodium Chloride Crystals (E)—O. V. Klyavin, S. G. Simashko and A. V. Stepanov. 14(1), 130–5 (Jul. 1972); CPM-7207D1089

—Temperature Dependences of the Elastic Constants of Bismuth (E)—Yu. A. Burenkov, A. A. Valiev, S. P. Nikanorov and A. V. Stepanov. 14(1), 215–6(C) (Jul. 1972); CPM-7207D1174

Stepanov, V. A.—Effect of Form of Inelastic Deformation on Intermolecular Reaction in Polymers (E/T)—V. A. Bershtein, N. A. Kalinina, S. V. Savin and V. A. Stepanov. 14(4), 975–7 (Oct. 1972); CPM-7210D0790

Stepanov, V. G.—Magnetic Properties of Tl^{2+} in K_2SO_4 Crystals (E/T)—R. L. Garifullina, V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(2), 525–7(C) (Aug. 1972); CPM-7208E0682

—Influence of Temperature on the ESR Spectrum of Mn^{2+} in Cs_2SO_4 (E)—R. Yu. Abdulsabirov, Yu. S. Greznev, M. M. Zaripov and V. G. Stepanov. 14(6), 1569–70(C) (Dec. 1972); CPM-7212D0905

—ESR of Hg^+ Ions in K_2SO_4 Crystals (E)—V. F. Krutikov, N. I. Silkin and V. G. Stepanov. 14(10), 2642–3(C) (Apr. 1973); CPM-7304E1288

—Electron Spin Resonance of V^{2+} Ions in BaF_2 (E)—R. Yu. Abdulsabirov, V. S. Kropotov, M. S. Orlov and V. G. Stepanov. 14 (11), 2917(C) (May 1973); CPM-7305D1145

—Exchange-Coupled Pairs of Mn^{2+} Ions in NaCl (E)—R. L. Garifullina, M. M. Zaripov, V. G. Stepanov and Yu. N. Tolparov. 14(12), 2959–61 (Jun. 1973); CPM-7306D0801

Stepanov, V. I.—Influence of the Adsorption of SiO Molecules on the Field Emission of Electrons from p-Type Germanium (E)—R. Z. Bakhtizin and V. I. Stepanov. 14(1), 245–6(C) (Jul. 1972); CPM-7207D1204

Stepina, E. I.—Some Features of the Damage of Calcite Crystals Caused by Laser Radiation (E)—R. I. Garber, E. I. Stepina and A. A. Stepanov. 14(1), 194–5(C) (Jul. 1972); CPM-7207D1153

—Thermally Activated Motion of Twinning Boundaries in Calcite (E)—R. I. Garber, V. M. Mikhailovskii and E. I. Stepina. 14(3), 773–4(C) (Sep. 1972); CPM-7209D0207

Sterin, Kh. E.—Transverse Polaritons in an $LiNbO_3$ Crystal (E)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(6), 1562–3(C) (Dec. 1972); CPM-7212D0898

—Polaritons in a Biaxial Crystal of $Ba_2NaNb_5O_{15}$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2402–3(C) (Mar. 1973); CPM-7303E1226

—Fermi Resonance of a Polariton with a Biphonon in a Crystal of $LiNbO_3$ (E)—B. N. Mavrin and Kh. E. Sterin. 14(9), 2432–3(C) (Mar. 1973); CPM-7303E1256

—Upper Branch of Ordinary Polaritons in an $LiNbO_3$ Crystal (E/T)—B. N. Mavrin, T. E. Abramovich and Kh. E. Sterin. 14(10), 2611 (C) (Apr. 1973); CPM-7304E1257

Stetsenko, Yu. E.—Influence of Zero Energy on the Plastic Deformation of Hydrogen (E)—Yu. E. Stetsenko, D. N. Bol'shutkin, L. A. Indan and A. A. Khudoteplaya. 14(1), 149–51 (Jul. 1972); CPM-7207D1108

Stolov, A. L.—Impurity Centers in NH_4Cl Crystals Activated with Iron Group Ions (E/T)—A. L. Stolov and Zh. S. Yakovleva. 14(7), 1810–2 (Jan. 1973); CPM-7301C0770

—Effect of the Indirect Exchange Interaction on the Crystal Field Parameters of Rhombic Er^{3+} Centers in Fluorite Crystals (T/E)—I. B. Aizenberg, M. D. Davydova and A. L. Stolov. 14(11), 2710–2 (May 1973); CPM-7305D0938

Stolyarov, O. G.—Effect of the Type and Concentration of Structural Point Defects on the Electrophysical Properties of Undoped Gallium Arsenide (E/T)—E. V. Solov'eva, V. V. Karataev, M. G. Mil'vidskii, V. B. Osvenskii and O. G. Stolyarov. 14(2), 441–4 (Aug. 1972); CPM-7208E0598

Stopachinskii, V. B.—Franz–Keldysh Effect in the Impurity Absorption Region (T/E)—Fan Ba Nyan, V. B. Stopachinskii and M. V. Fok. 14(12), 3000–3 (Jun. 1973); CPM-7306D0842

Stozharov, V. M.—Angular Distribution of Inelastically Reflected Electrons (E)—I. M. Bronshtein, V. M. Stozharov and V. P. Pronin. 14(4), 927–30 (Oct. 1972); CPM-7210D0742

Strakhov, L. P.—Mechanical Strains in Vacuum-Deposited CdTe Films (E)—A. I. Vovsi, L. P. Strakhov and O. A. Yakovuk. 14(5), 1251–4 (Nov. 1972); CPM-7211A1503

Straklov, L. I.—Changes in Mechanical Stress of Cadmium Telluride Thin Films Caused by Photostimulated Adsorption of Oxygen (E)—A. I. Vovsi and L. I. Straklov. 14(11), 2863–5 (May 1973); CPM-7305D1091

Strashnikova, M. I.—Form of Exciton Absorption Bands of CdS Single Crystals at T=4.2°K (E)—M. I. Strashnikova and A. T. Rudchik. 14(4), 845–8 (Oct. 1972); CPM-7210D0660

—Piezooptic Investigations of the Exciton Spectrum of CdS (E)—M. S. Brodin, I. V. Blonskii, N. A. Davydova and M. I. Strashnikova. 14(11), 2841–4 (May 1973); CPM-7305D1069

Strekalov, V. N.—Effect of an Electromagnetic Field on Ionization by Collision (T)—V. N. Strekalov. 14(5), 1348–9(C) (Nov. 1972); CPM-7211A1600

Strukov, B. A.—Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700

Strunin, B. M.—Accumulation of Dislocations in Random Fields of Internal Stresses and the Initial Stage in the Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(4), 920–6 (Oct. 1972); CPM-7210D0735

—Relationships Governing the Initial Stage of Plastic Deformation of Crystals (T)—A. A. Alekseev and B. M. Strunin. 14(9), 2440–1(C) (Mar. 1973); CPM-7303E1264

Stukan, R. A.—Mössbauer Spectroscopic Investigation of the Structure of Layered Compounds of Graphite and Iron (E)—R. A. Stukan, Yu. N. Novikov, V. A. Povitskii and A. N. Salugin. 14(11), 2914–5(C) (May 1973); CPM-7305D1142

Stupak, V. A.—Influence of Channeling on the Scintillation Efficiency of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(1), 209–10(C) (Jul. 1972); CPM-7207D1168

—Orientational Dependence of the Scintillation Yield of a CsI:Tl Single Crystal (E)—E. A. Kuleshov, V. A. Stupak and É. T. Shipatov. 14(4), 1073–4(C) (Oct. 1972); CPM-7210D0888

Stupin, V. A.—Inelastic Phenomena in Sodium Chloride Whiskers (E)—L. B. Zuev, V. D. Mal'tsev, L. M. Vysoven' and V. A. Stupin. 14(4), 1096–7(C) (Oct. 1972); CPM-7210D0911

Subashiev, V. K.—Linear Electrooptical Effect in Gallium Selenide (E)—V. I. Sokolov and V. K. Subashiev. 14(1), 178–83 (Jul. 1972); CPM-7207D1137

—Plasmon–Phonon Interaction in Gallium Antimonide (T/E)—N. V. Bozhovskaya and V. K. Subashiev. 14(7), 1627–33 (Jan. 1973); CPM-7301C0587

—Nonlinear Absorption of IR Radiation in Indium Antimonide (E/T)—A. M. Danishevskii, S. F. Kochegarov and V. K. Subashiev. 14(11), 2754–8 (May 1973); CPM-7305D0982

Sudakova, N. P.—Phase Transition in Mn_5Si_3 (E)—P. V. Gel'd, A. V. Mikhel'son, G. I. Kalishevich, R. P. Krentsis, Yu. V. Putintsev and N. P. Sudakova. 14(3), 798–800(C) (Sep. 1972); CPM-7209D0232

Suetin, P. E.—Diffusion and Solubility of Helium in NaCl Crystals (E)—N. N. Alekseenko, P. V. Volobuev and P. E. Suetin. 14(8), 2073–5 (Feb. 1973); CPM-7302E1199

Sugakov, V. I.—Absorption of Light by Bound Excitons in Semiconductors (T)—V. A. Andreev and V. I. Sugakov. 14(5), 1338–9(C) (Nov. 1972); CPM-7211A1590

—Surface Excitons and their Effect on Optical Properties of Crystals (T)—V. I. Sugakov. 14(7), 1711–7 (Jan. 1973); CPM-7301C0671

Sukhov, D. A.—Photoionization of Molecules of Anthracene and Its Methyl Derivatives Embedded in Polymethylmethacrylate (E)—F. I. Vilesov and D. A. Sukhov. 14(8), 2069–72 (Feb. 1973); CPM-7302E1195

Sulkovskii, Ch.—Temperature Dependence of the Amplitude of the Quantum Oscillations of the Resistance of Thin Tin Films (E/T)—Yu. F. Komnik, E. I. Bukhshtab, Yu. V. Nikitin and Ch. Sulkovskii. 14(2), 543–5(C) (Aug. 1972); CPM-7208E0700

Sultanov, M. B.—Absorption of Ultrasound in Semimetals (T)—I. A. Gilinskii and M. B. Sultanov. 14(7), 1653–9 (Jan. 1973); CPM-7301C0613

Suris, R. A.—Feasibility of Suppression of Gunn Domains (T)—S. N. Artemenko, R. F. Kazarinov and R. A. Suris. 14(6), 1393–9 (Dec. 1972); CPM-7212D0729

—Nonlinear Theory of Slow Recombination Waves (T)—V. A. Gergel', R. F. Kazarinov and R. A. Suris. 14(6), 1457–61 (Dec. 1972); CPM-7212D0793

Suslin, L. A.—Scattering of Conduction Electrons by Tunneling States of Defects in Ionic Crystals (T/E)—M. F. Deigen, M. D. Glinchuk and L. A. Suslin. 14(8), 2096–9 (Feb. 1973); CPM-7302E1222

Suslina, L. G.—Excitation of Exciton States in ZnS Crystals Containing Stacking Faults (E)—L. G. Suslina and E. B. Shadrin. 14(1), 243–4(C) (Jul. 1972); CPM-7207D1202

—Exciton Piezoreflection in ZnS Crystals Containing Stacking Faults (E)—G. L. Bir, G. E. Pikus, L. G. Suslina and D. L. Fedorov. 14(3), 732–7 (Sep. 1972); CPM-7209D0166

—Exciton Spectrum of Photoconductivity in Zinc Sulfide Crystals (E)—A. V. Il'inskii, B. V. Novikov, L. G. Suslina and E. B. Shadrin. 14(7), 1673–7 (Jan. 1973); CPM-7301C0633

—Piezospectroscopic Investigation of Excited Exciton States in Cubic ZnS Single Crystals (E)—L. G. Suslina and D. L. Fedorov. 14(10), 2575–8 (Apr. 1973); CPM-7304E1221

Suvorov, É. V.—Experimental Investigation and Calculation of the X-Ray Diffraction Contrast of a Single Dislocation (E/T)—V. I. Polovinkina, É. V. Suvorov, F. N. Chukhovskii and A. A. Shmol'berg. 14(7), 1699–702 (Jan. 1973); CPM-7301C0659

Suzdalev, I. P.—Study of Iron Atom Vibrations in Vivianite and Pyrite Crystals Using Mössbauer Spectroscopy (E)—I. P. Suzdalev, I. A. Vinogradov and V. K. Imshennik. 14(5), 1136–42 (Nov. 1972); CPM-7211A1388

—Study of the Magnetic Properties of χ and θ Iron Carbide Using Mössbauer Spectroscopy (E)—Yu. V. Maksimov, I. P. Suzdalev and R. A. Arents. 14(11), 2832–4 (May 1973); CPM-7305D1060

Svetlov, Yu. E.—Effect of Microcracks on the Local Stress Distribution in Polymers and Their Deformation Properties. Network Model (T)—Yu. Ya. Gotlib, A. M. El'yashevich and Yu. E. Svetlov. 14(11), 2672–7 (May 1973); CPM-7305D0900

Svirina, E. P.—"Rotational Hall Effect" in a Nickel Single Crystal (E)—E. P. Svirina and Yu. V. Nemchinov. 14(8), 2161–2(C) (Feb. 1973); CPM-7302E1287

Svistunova, K. I.—Effect of Band Structure on the Recombination Mechanism of Condensed Charge Carriers in Germanium, Silicon, and Their Alloys (E/T)—Ya. E. Pokrovskii, K. I. Svistunova and N. V. Alkeev. 14(11), 2805–7 (May 1973); CPM-7305D1033

Syrkin, L. N.—New Ferroelectric : Antimony Orthoniobate (T)—A. N. Lobachev, V. F. Peskin, V. I. Popolitov, L. N. Syrkin and N. N. Feoktistova. 14(2), 509–10(C) (Aug. 1972); CPM-7208E0666

—Critical Point in Ferroelectric SbSI (E)—L. N. Syrkin, I. N. Polandov, N. P. Kachalov and E. V. Gamynin. 14(2), 517–8(C) (Aug. 1972); CPM-7208E0674

—Electromechanical Hysteresis and Photodeformation Effect in SbSI Single Crystals (E)—A. A. Grekov, E. D. Rogach and L. N. Syrkin. 14(9), 2396–7(C) (Mar. 1973); CPM-7303E1220

Syrnikov, P. P.—Interaction of Transverse Elastic Waves with Spin Waves in the Uniaxial Ferromagnet $RbNiF_3$ (E/T)—A. N. Grishmanovskii, V. V. Lemanov, G. A. Smolenskii and P. P. Syrnikov. 14(8), 2050–2 (Feb. 1973); CPM-7302E1176

Sysoev, L. A.—Spectrum of Co^{2+} Ion in ZnS–Co and Al Crystals Grown from the Melt (E)—A. I. Ryskin, L. A. Sysoev and G. I. Khil'ko. 14(3), 779–80(C) (Sep. 1972); CPM-7209D0213

T

Tagieva, M. M.—Influence of Doping and Temperature on the Plastic Deformation of Potassium Chloride Crystals (E)—M. M. Tagieva, A. A. Blistanov, M. P. Shaskol'skaya, I. V. Nosova and V. F. Gaiduchenya. 14(7), 1874–5(C) (Jan. 1973); CPM-7301C0834

Talalaevskii, V. M.—Intrinsic Emission from Yttrium Iron Garnet in the Presence of a Domain Structure (E)—N. I. Lyashenko, V. M. Talalaevskii and I. A. Mishina. 14(9), 2328–9 (Mar. 1973); CPM-7303E1152

Tallerchik, B. A.—Optical Properties of V_2O_3 in the Region of the Phase Transition (E/T)—M. S. Kozyreva, V. N. Novikov and B. A. Tallerchik. 14(3), 639–43 (Sep. 1972); CPM-7209D0073

Tam, Kusk Tkhi—Nonlinear Effects in the Propagation of Sound in a Ferroelectric Close to the Phase Transition (E)—O. Yu. Serdobol'skaya and Kusk Tkhi Tam. 14(8), 2114–5(C) (Feb. 1973); CPM-7302E1240

Tamarchenko, V. I.—Resonance Interaction between Carriers in Polar Semiconductors (T)—Yu. I. Ravich and V. I. Tamarchenko. 14(8), 1945–9 (Feb. 1973); CPM-7302E1071

Tamarin, P. V.—Galvanomagnetic and Thermomagnetic Effects in p-Type InSb (E)—P. V. Tamarin, S. S. Shalyt, I. G. Lang and S. T. Pavlov. 14(1), 47–57 (Jul. 1972); CPM-7207D1006

Tankhilevich, B. G.—Magnon Thermal Conductivity of Antiferromagnetic Metals (T)—I. Ya. Korenblit and B. G. Tankhilevich. 14(10), 2588–90 (Apr. 1973); CPM-7304E1234

Tarakanov, V. V.—Role of Hopping Conductivity in Absorption and Dispersion of Hypersound in CdS (E/T)—E. M. Ganapol'skii and V. V. Tarakanov. 14(2), 404–7 (Aug. 1972); CPM-7208E0561

Taran, A. A.—Magnetic Structure and Temperature Dependences of Resonance Fields of Indium–Substituted M–Type Ferrites (E)—Yu. A. Mamalui, A. A. Murakhovskii and A. A. Taran. 14(7), 1703–6 (Jan. 1973); CPM-7301C0663

Tarantov, Yu. A.—Change in the Surface Potential of Ge in an Electrolyte During Mechanical Deformation (E)—P. P. Konorov and Yu. A. Tarantov. 14(7), 1881–2(C) (Jan. 1973); CPM-7301C0841

Tarasenko, V. V.—Magnon Density of States in Canted Antiferromagnets with Substitutional Impurities (T)—I. E. Dikshtein and V. V. Tarasenko. 14(5), 1221–4 (Nov. 1972); CPM-7211A1473

—Critical Scattering of Neutrons in Ferrites and Antiferromagnets in a Magnetic Field (T)—V. G. Bar'yakhtar, V. V. Tarasenko and D. A. Yablonskii. 14(8), 2006–9 (Feb. 1973); CPM-7302E1132

—Surface Electric Field Arising from Three–Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Tarasov, G. G.—Some Features of Exciton Effects in Layer Crystals (T/E)—M. P. Lisitsa, A. M. Yaremko, G. G. Tarasov, M. Ya. Valakh and L. I. Berezhinskii. 14(11), 2744–7 (May 1973); CPM-7305D0972

Tartakovskii, I. I.—Luminescence Kinetics of Free and Bound Excitons in CdS Crystals (E)—V. L. Broude, I. I. Tartakovskii and V. B. Timofeev. 14(12), 2971–6 (Jun. 1973); CPM-7306D0813

Tatarenko, L. N.—Luminescence of Single Crystals of the Ferroelectric Semiconductor SbSI (E)—M. K. Sheinkman, N. M. Krolevets, É. A. Savchenko and L. N. Tatarenko. 14(1), 253–4(C) (Jul. 1972); CPM-7207D1212

Tatarenko, O. N.—High–Frequency Magnetic Properties of Nickel—Cobalt—Zinc Ferrites (E)—S. A. Poltinnikov and O. N. Tatarenko. 14(2), 349–50 (Aug. 1972); CPM-7208E0506

Tatur, A. O.—Adsorbed State of Positronium Atoms (E)—A. O. Tatur and A. D. Mokrushin. 14(10), 2617–8(C) (Apr. 1973); CPM-7304E1263

Tazhibaeva, S.—Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585

Teimurazyan, V. V.—Effect of a Magnetic Field on the Intensity of Exchange–Dipole Transitions (T/E)—V. V. Druzhinin and V. V. Teimurazyan. 14(6), 1381–4 (Dec. 1972); CPM-7212D0717

Telegin, A. A.—Surface Electric Field Arising from Three–Dimensional Defects (T/E)—I. M. Kotelyanskii, A. Yu. Mityagin, V. P. Orlov, K. S. Pogorel'skii, V. V. Tarasenko and A. A. Telegin. 14(11), 2794–8 (May 1973); CPM-7305D1022

Telesnin, R. V.—Internal Effective Field During Nonuniform Rotation in Ferrite Cores (E)—O. S. Kolotov, A. A. Laptev, V. A. Pogozhev and R. V. Telesnin. 14(1), 228–9(C) (Jul. 1972); CPM-7207D1187

Tel'kovskii, V. G.—Anisotropy of the Energy Spectra of Electrons Emitted as a Result of Proton Bombardment of Molybdenum (E/T)—L. B. Begrambekov, S. K. Zhdanov and V. G. Tel'kovskii. 14(12), 3075–6(C) (Jun. 1973); CPM-7306D0917

Teplov, M. A.—Magnetic Resonance at Nuclei of Rare–Earth Ions Having a Nonmagnetic Doublet Ground State (T)—M. P. Vaisfel'd and M. A. Teplov. 14(9), 2243–5 (Mar. 1973); CPM-7303E1067

Terent'eva, L. M.—Noncentral Interaction in Crystals and Molecules According to the Valence–Bond Model (T)—L. M. Terent'eva, Yu. A. Logachev and B. Ya. Moizhes. 14(10), 2543–9 (Apr. 1973); CPM-7304E1189

Terpugov, E. L.—Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskis, E. I. Balabanov and A. I. Vasil'ev. 14 (12), 3028–31 (Jun. 1973); CPM-7306D0870

Tetervov, A. P.—Overheating Instability of Helicons in Finite Semiconductors (T)—A. P. Tetervov and V. M. Yakovenko. 14(9), 2220–3 (Mar. 1973); CPM-7303E1044

Tiisler, É. S.—Electron–Microscope Detection and Optical Investigation of Exciton Decay Products in KBr Crystals (E/T)—Kh. R.–V. Iygi, Ch. B. Lushchik, A. F. Malysheva and É. S. Tiisler. 14(1), 95–100 (Jul. 1972); CPM-7207D1054

Tikhonov, V. V.—Elastic Wave Damping in Cubic Crystals According to the Akhiezer Mechanism (E)—V. Ya Avdonin, V. V. Lemanov, I. A. Smirnov and V. V. Tikhonov. 14(3), 747–52 (Sep. 1972); CPM-7209D0181

—Thermodynamic Characteristics of Metals in the Finely Dispersed State (E)—V. N. Bogomolov, N. A. Klushin, M. V. Romanova, I. A. Smirnov and V. V. Tikhonov. 14(9), 2330–4 (Mar. 1973); CPM-7303E1154

Timan, B. L.—Nonmonotonic Conductivity Dependence of the Sound Amplification Threshold in Piezoelectric Semiconductors (E/T)—B. L. Timan, V. D. Ryzhikov and V. K. Komar'. 14(3), 668–70 (Sep. 1972); CPM-7209D0102

—Effect of Dislocation Broadening on the Shape of a Nuclear Magnetic Resonance Line (E)—Yu. A. Grinchenko and B. L. Timan. 14(6), 1404–7 (Dec. 1972); CPM-7212D0740

Timashev, S. F.—Thermal Ionization of Deep Centers in the Space–Charge Region of Semiconductors (T)—S. F. Timashev. 14 (1), 136–8 (Jul. 1972); CPM-7207D1095

—Impurity Absorption of Light in a Strong Electric Field below the Absorption Edge (T)—S. F. Timashev. 14(9), 2267–9 (Mar. 1973); CPM-7303E1091

Timerov, R. Kh.—Effect of Interband Interactions on the Critical Temperature of the Superconducting Transition in a Semimetal (T) —Yu. V. Kopaev and R. Kh. Timerov. 14(1), 69–75 (Jul. 1972); CPM-7207D1028

Timofeev, A. N.—Self–Diffusion of Nickel in Polycrystalline Nickel Oxide (E)—S. M. Klotsman, A. N. Timofeev and I. Sh. Trakhtenberg. 14(3), 763–5(C) (Sep. 1972); CPM-7209D0197

Timofeev, V. A.—Erratum: Correction to the Paper by V.A. Timofeev "Shift of the Paramagnetic Resonance Line Due to a Spin–Phonon Interaction" [11, 1897 (1970)] (E)—V. A. Timofeev. 14(4), 1089 (C) (Oct. 1972); CPM-7210D0904

Timofeev, V. B.—Anomalous Intensity of Exciton–Impurity Absorption in CdS Crystals (E)—V. B. Timofeev and T. N. Yalovets. 14(2), 399–403 (Aug. 1972); CPM-7208E0556

—Luminescence Kinetics of Free and Bound Excitons in CdS Crystals (E)—V. L. Broude, I. I. Tartakovskii and V. B. Timofeev. 14(12), 2971–6 (Jun. 1973); CPM-7306D0813

Timofeev, Yu. A.—Dependence of the Magnetic Anisotrophy of Yttrium Iron Garnet on Pressure and Temperature (E/T)—Yu. A. Timofeev, E. N. Yakovlev and A. N. Ageev. 14(5), 1131–5 (Nov. 1972); CPM-7211A1383

—Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14(11), 2835–7 (May 1973); CPM-7305D1063

Timofeeva, V. A.—Anomalies in the Temperature Dependence of the Spontaneous Magnetization of Neodymium Orthochromite (E)—K. P. Belov, M. A. Belyanchikova, A. M. Kadomtseva, I. B. Krynetskii, T. M. Lednev, T. L. Ovchinnikova and V. A. Timofeeva. 14(1), 199–200(C) (Jul. 1972); CPM-7207D1158

—Distinguishing Features of Magnetic Properties of Single-Crystal $YFe_xCr_{1-x}O_3$ (E)—K. P. Belov, A. M. Kadomtseva, I. B. Krynetskii, T. L. Ovchinnikova, G. N. Ronami and V. A. Timofeeva. 14(5), 1306–8(C) (Nov. 1972); CPM-7211A1558

Timonina, E. A.—Light Absorption by Free Carriers Due to Interactions between Them (T)—G. K. Vlasov, V. S. Mashkevich and E. A. Timonina. 14(11), 2870–4 (May 1973); CPM-7305D1098

Timoshchuk, V. I.—Magnetic Properties of $Mn_{2+x}Ni_xB_4$ in Strong Magnetic Fields (E)—V. I. Timoshchuk and I. G. Fakidov. 14(6), 1424–7 (Dec. 1972); CPM-7212D0760

Timoshechkin, M. I.—Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

Timoshenkov, V. A.—Intrinsic Absorption and Thermal Properties of Stibiotantalite (E/T)—V. K. Novik, N. F. Karyakina and V. A. Timoshenkov. 14(5), 1288–90 (Nov. 1972); CPM-7211A1540

Tishchenko, A. V.—Two-Dimensional Magnetic Ordering in $BaMnF_4$ (E)—R. V. Zorin, B. I. Al'shin, D. N. Astrov and A. V. Tishchenko. 14(10), 2661–2(C) (Apr. 1973); CPM-7304E1307

Tishin, E. A.—Heat of Adsorption of Barium on (100) and (110) Faces of Tungsten and Molybdenum (E)—B. V. Bondarenko, N. D. Konovalov and E. A. Tishin. 14(12), 3078(C) (Jun. 1973); CPM-7306D0920

Titkov, A. N.—Indirect Phononless Optical Transitions in Mixed Germanium–Silicon Crystals (E/T)—V. I. Safarov and A. N. Titkov. 14(2), 380–3 (Aug. 1972); CPM-7208E0537

—Zero–Phonon Radiative Annihilation of Indirect Excitons in Germanium Crystals with Isoelectronic Substitutional Impurities (T)—E. F. Gross, N. S. Sokolov and A. N. Titkov. 14(7), 1732–4 (Jan. 1973); CPM-7301C0692

Titov, V. A.—Effect of a Uniaxial Mechanical Stress on the Dielectric Constant of KDP in the Region of Positive Temperatures (E)—A. I. Savinkov, M. P. Shaskol'skaya, V. M. Petrov and V. A. Titov. 14(7), 1735–7 (Jan. 1973); CPM-7301C0695

Titova, A. G.—Optical Anisotropy and Cylindrical Domains in $(Gd,Tb,Eu)_3FeO_{12}$ Ferrite Garnets (E)—R. V. Pisarev, N. N. Kolpakova, Yu. M. Yakovlev, V. S. Filonich and A. G. Titova. 14 (2), 300–2 (Aug. 1972); CPM-7208E0457

Tkachev, V. D.—Hybridization of the Atomic Orbitals at Structural Defects in Si (T)—A. N. Zhevno, V. F. Stel'makh and V. D. Tkachev. 14(4), 1007–11 (Oct. 1972); CPM-7210D0822

Tkalenko, E. N.—Poole–Frenkel Effect in β Rhombohedral Boron (E)—A. A. Berezin, V. K. Zaitsev, M. M. Kazanin and E. N. Tkalenko. 14(9), 2445–6(C) (Mar. 1973); CPM-7303E1269

Tolparov, Yu. N.—Exchange–Coupled Pairs of Mn^{2+} Ions in NaCl (E)—R. L. Garifullina, M. M. Zaripov, V. G. Stepanov and Yu. N. Tolparov. 14(12), 2959–61 (Jun. 1973); CPM-7306D0801

Tolpygo, K. B.—High–Symmetry Exciton in Alkali Halide Crystals (T)—T. A. Kudykina and K. B. Tolpygo. 14(2), 535–6(C) (Aug. 1972); CPM-7208E0692

—Exciton Energy Spectra in Crystals of the Diamond and Sphalerite Types (T)—S. M. Zubkova and K. B. Tolpygo. 14(6), 1514–7 (Dec. 1972); CPM-7212D0850

—D_{2h} Exciton in an Alkali Halide Crystal (E)—T. A. Kudykina and K. B. Tolpygo. 14(9), 2187–91 (Mar. 1973); CPM-7303E1011

—Force Constants and Phonon Dispersion in Rare–Gas Crystals (T/E)—K. B. Tolpygo and E. P. Troitskaya. 14(10), 2480–3 (Apr. 1973); CPM-7304E1126

—Behavior of Alkali Atoms Introduced into the Xenon Lattice (T)—M. A. Belogolovskii and K. B. Tolpygo. 14(10), 2571–4 (Apr. 1973); CPM-7304E1217

Tomashevskii, É. E.—Paramagnetic Centers Produced by Mechanical Destruction of Silica (E/T)—K. A. Akhmed–zade, V. V. Baptizmanskii, V. A. Zakrevskii and É. E. Tomashevskii. 14(2), 351–4 (Aug. 1972); CPM-7208E0508

Tomashpol'skii, Yu. Ya.—Vacuum–Evaporated Ferroelectric Barium Titanate Thinner Than 1000 Å (E)—Yu. Ya. Tomashpol'skii and M. A. Sevost'yanov. 14(9), 2319–21 (Mar. 1973); CPM-7303E1143

Tomchuk, P. M.—Fluctuations in Many–Valley Semiconductors Due to Intervalley Transitions (T)—P. M. Tomchuk and A. A. Chumak. 14(8), 2031–4 (Feb. 1973); CPM-7302E1157

Tontegode, A. Ya.—Work Function of Film Systems and Heat of Desorption of Particles from a Film (E)—É. Ya. Zandberg and A. Ya. Tontegode. 14(7), 1850–2(C) (Jan. 1973); CPM-7301C0810

Toperverg, B. P.—Spin Waves in Anisotropic Antiferromagnets (T)—B. P. Toperverg. 14(4), 931–3 (Oct. 1972); CPM-7210D0746

Totubalin, V. N.—Stability Boundary of the Superconducting State in a Type I Superconductor (E)—A. P. Smirnov and V. N. Totubalin. 14(8), 2066–8 (Feb. 1973); CPM-7302E1192

—Low–Frequency Absorption in the Mixed State of Type II Superconductors (E/T)—A. P. Smirnov and V. N. Totubalin. 14 (8), 2150–2(C) (Feb. 1973); CPM-7302E1276

Trakhbrot, B. M.—Conversion of Molecular CO_3^{3-} Centers in KCl and KBr Single Crystal Presurface Layers (E)—N. G. Politov and B. M. Trakhbrot. 14(2), 483–4(C) (Aug. 1972); CPM-7208E0640

Trakhtenberg, I. Sh.—Self–Diffusion of Nickel in Polycrystalline Nickel Oxide (E)—S. M. Klotsman, A. N. Timofeev and I. Sh. Trakhtenberg. 14(3), 763–5(C) (Sep. 1972); CPM-7209D0197

Travnikov, V. V.—Spectroscopic Observation of the Lifetime of Free Excitons (T/E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(5), 1193–8 (Nov. 1972); CPM-7211A1445

—Kinetics of Bound–Exciton Formation in CdS Crystals (E)—E. F. Gross, S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14 (5), 1331–2(C) (Nov. 1972); CPM-7211A1583

—Effects of Spatial Dispersion in the Reflection Spectra of Crystals Obtained for Oblique Incidence of Light (T/E)—S. A. Permogorov, V. V. Travnikov and A. V. Sel'kin. 14(12), 3051–6 (Jun. 1973); CPM-7306D0893

Tregubova, A. S.—Defects in Semiconducting Silicon Carbide Crystals (E)—A. S. Tregubova and I. L. Shul'pina. 14(9), 2305–8 (Mar. 1973); CPM-7303E1129

—Intensities of X–Ray Reflections from the Basal Plane in Silicon Carbide (E)—R. N. Kyutt and A. S. Tregubova. 14(12), 3008–11 (Jun. 1973); CPM-7306D0850

—Structural Imperfections of Diffusion–Doped SiC(6H) Layers (E)—A. S. Tregubova, E. N. Mokhov and I. L. Shul'pina. 14(12), 3061–3 (Jun. 1973); CPM-7306D0903

Tret'yakov, Yu. D.—Magnetic Properties of Copper–Chromium Chalcogenides (E)—K. P. Belov, Yu. D. Tret'yakov, I. V. Gordeev, L. I. Koroleva, A. V. Ped'ko, E. I. Smirnovskaya, V. A. Alferov and Yu. G. Saksonov. 14(7), 1862–3(C) (Jan. 1973); CPM-7301C0822

Trofimov, V. I.—Diffusion Mechanism of Nucleation of Gold on an Ionic Crystal (E)—V. I. Trofimov and V. M. Luk'yanovich. 14(1), 239–41(C) (Jul. 1972); CPM-7207D1198

—Mechanism of Oriented Crystallization of Gold on an Intermediate Layer of Amorphous Carbon (E)—V. I. Trofimov and A. E. Gorodetskii. 14(3), 760–2(C) (Sep. 1972); CPM-7209D0194

Troitskaya, E. P.—Force Constants and Phonon Dispersion in Rare–Gas Crystals (T/E)—K. B. Tolpygo and E. P. Troitskaya. 14 (10), 2480–3 (Apr. 1973); CPM-7304E1126

Tron'ko, V. D.—Influence of Internal Stresses on Magnetic Birefringence of Yttrium Ferrite Garnet (E)—V. A. Babko and V. D. Tron'ko. 14(9), 2426–7(C) (Mar. 1973); CPM-7303E1250

Tropin, Yu. D.—Initial Permeability of Magnetite in the Region of the Low–Temperature Phase Transition (E)—Yu. D. Tropin and A. A. Lepishev. 14(10), 2654–5(C) (Apr. 1973); CPM-7304E1300

Trubitsin, V. A.—Magnetoresistance of Gadolinium and Holmium in Strong Effective Fields (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14(3), 655–7 (Sep. 1972); CPM-7209D0089

—Hall Effect in Gadolinium in Fields up to 46 kOe at Liquid–Helium Temperatures (E)—O. S. Galkina, L. V. Lazareva and V. A. Trubitsin. 14(9), 2224–6 (Mar. 1973); CPM-7303E1048

Tsal', N. A.—Formation of F Centers in Oxygen–Doped NaCl Crystals (E)—R. I. Didyk and N. A. Tsal'. 14(6), 1596–8(C) (Dec. 1972); CPM-7212D0932

Tsanev, V. I.—Scattering of Light by Optical Phonons in $Bi_{12}SiO_{20}$ Crystals (E)—B. Kh. Bairamov, I. S. Rez, Z. M. Khashkhozhev and V. I. Tsanev. 14(6), 1473–6 (Dec. 1972); CPM-7212D0809

Tsapkov, V. I.—Overheating of the Hexagonal Modification of Zirconium Above the Polymorphic Transition Temperature under Pulse Heating Conditions (E)—M. M. Martynyuk and V. I. Tsapkov. 14(6), 1558–9(C) (Dec. 1972); CPM-7212D0894

Tseretell, G. I.—Calorimetric Study of the Recrystallization and Reorganization Processes of Crystallites of a Polymer (E)—I. V. Sochava, G. I. Tseretelí and O. I. Smirnova. 14(2), 460–6 (Aug. 1972); CPM-7208E0617

Tsintsadze, G. A.—Dependence on Concentration and Frequency of Spin–Lattice Relaxation of Co^{2+} in Monoclinic Tungstates (E)—A. D. Prokhorov and G. A. Tsintsadze. 14(11), 2802–4 (May 1973); CPM-7305D1030

—ESR Spectrum of Cr^{3+} Ions in $LiGa_5O_8$ at Low Temperatures (E)—A. Yu. Kozhukhar', V. N. Seleznev, G. A. Tsintsadze and V. A. Shapovalov. 14(11), 2892–3(C) (May 1973); CPM-7305D1120

Tsintsadze, N. L.—Possible Parametric Resonance in Degenerate n-Type InSb (E)—N. L. Tsintsadze and V. S. Paverman. 14(11), 2890–1(C) (May 1973); CPM-7305D1118

Tsukerblat, B. S.—Profile of the Optical Absorption and Luminescence Bands in Systems Exhibiting the Renner Effect (T)—V. P. Khlopin, B. S. Tsukerblat, Yu. B. Rozenfel'd and I. B. Bersuker. 14(4), 908–14 (Oct. 1972); CPM-7210D0723

—Reduction Factors of Jahn–Teller Systems (T)—V. Z. Polinger, Yu. B. Rozenfel'd, B. S. Tsukerblat and B. G. Vekhter. 14(8), 2165–7 (C) (Feb. 1973); CPM-7302E1291

—Effects of Vibron Reduction of the Coulomb and Exchange Interactions in Impurity Pairs (T)—B. S. Tsukerblat and B. G. Vekhter. 14(9), 2204–8 (Mar. 1973); CPM-7303E1028

Tsukernik, V. M.—Low–Temperature Absorption of Ultrasound in Ferromagnetic Insulators with Weak Anisotropy (T)—T. E. Rodkina and V. M. Tsukernik. 14(12), 2956–8 (Jun. 1973); CPM-7306D0798

Tsveiman, E. V.—Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585

—Characteristic Energy Loss Spectra of Electrons from La, Ce, Pr, and Nd Surfaces (E)—V. V. Zashkvara, E. V. Tsveiman, M. I. Korsunskii and V. S. Red'kin. 14(6), 1564–6(C) (Dec. 1972); CPM-7212D0900

Tsvetkov, E. A.—Compensation of the Excess Charge During Activation of Scheelites with Rare–Earth Ions (E)—R. Yu. Abdulsabirov, A. A. Antipin, I. N. Kurkin, E. A. Tsvetkov, Yu. K. Chirkin and V. I. Shlenkin. 14(1), 255–7(C) (Jul. 1972); CPM-7207D1214

Tsvetkov, Yu. D.—Spin–Lattice Relaxation of Hydrogen Atoms and Paramagnetic Ions in Sulfuric Acid Vitreous Aqueous Solutions at 77°K (E/T)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1915–8 (Feb. 1973); CPM-7302E1041

—Spin Diffusion and Spin–Lattice Relaxation Kinetics of Hydrogen Atoms in Glassy Matrices at 77°K (T/E)—A. D. Milov, K. M. Salikhov and Yu. D. Tsvetkov. 14(8), 1956–60 (Feb. 1973); CPM-7302E1082

Tsvirko, Yu. A.—Nonlinear Magnetoacoustic Resonance in Ferromagnets (T)—V. P. Lukomskii and Yu. A. Tsvirko. 14(5), 1228–32 (Nov. 1972); CPM-7211A1480

Tsyashchenko, Yu. P.—Infrared Absorption of SO_4^{2-}, CrO_4^{2-}, and SeO_4^{2-} Impurity Ions in a CsI Crystal (E)—Yu. P. Tsyashchenko and V. P. Dem'yanenko. 14(3), 791–3(C) (Sep. 1972); CPM-7209D0225

Tsyganov, A. D.—Positronium Atom in Ionic Crystals with NaCl–Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14(3), 608–12 (Sep. 1972); CPM-7209D0042

—Positron Annihilation in Certain Transition Metal Hydrides (E)—V. I. Sabin, R. A. Andrievskii, V. V. Gorbachev and A. D. Tsyganov. 14(11), 2815–7 (May 1973); CPM-7305D1043

Tsyganov, V. V.—Equations for Nuclear Quadrupole Relaxation in Molecular Crystals Allowing for Nondiagonal Elements of the Density Matrix (T)—N. N. Korst, V. V. Tsyganov and N. E. Ainbinder. 14(8), 2118–9(C) (Feb. 1973); CPM-7302E1244

Tsymbal, L. T.—Determination of the Mean Free Path of Electrons in Metals (T)—V. P. Naberezhnykh, L. T. Tsymbal and M. S. Purchinskii. 14(2), 431–3 (Aug. 1972); CPM-7208E0588

Tsypkin, S. I.—Radiation–Induced Defects and Their Influence on the Critical Current in Superconducting Niobium (E/T)—S. I. Tsypkin. 14(3), 811–2(C) (Sep. 1972); CPM-7209D0245

Tukhvatullin, R. S.—Spin–Lattice Relaxation of Co^{2+} Ions in $Na_2Zn(SO_4)_2 \cdot 4H_2O$ and $Na_2Cd(SO_4)_2 \cdot 2H_2O$ Single Crystals (E)—R. S. Tukhvatullin, A. A. Fedii and Yu. K. Chirkin. 14(11), 2896–7 (C) (May 1973); CPM-7305D1124

Tulinov, A. F.—Shape of the Planar Shadow for Scattering of Particles by a Thick Single Crystal (T)—G. P. Pokhil and A. F. Tulinov. 14(7), 1669–72 (Jan. 1973); CPM-7301C0629

Tulinova, O. L.—Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14(10), 2539–42 (Apr. 1973); CPM-7304E1185

Turgunov, T.—Switching Effect in Molten Oxides Sb_2O_3 and B_2O_3 (E)—A. A. Andreev, S. D. Zainutdinov, B. T. Melekh, T. Turgunov and E. A. Shmuratov. 14(12), 3102–3(C) (Jun. 1973); CPM-7306D0944

Turyanitsa, I. D.—Influence of the Nonequilibrium Carrier Density on the Formation of Phase Boundaries in $SbSI_xBr_{1-x}$ Single Crystals (E)—I. I. Groshik, I. D. Turyanitsa and P. M. Migolinets. 14(10), 2614–5(C) (Apr. 1973); CPM-7304E1260

Tutov, A. G.—Investigation of the Structure and Magnetic Properties of $KNiPO_4$ Single Crystals (E)—A. G. Tutov, S. A. Kizhaev and M. K. Chizhov. 14(6), 1603–4(C) (Dec. 1972); CPM-7212D0939

—Relaxational Character of the Dielectric Polarization in the Region of the Phase Change of New Compounds of the Pyrochlore Type (E/T)—G. I. Golovshchikova, V. A. Isupov, A. G. Tutov, I. E. Myl'nikova, P. A. Nikitina and O. I. Tulinova. 14(10), 2539–42 (Apr. 1973); CPM-7304E1185

Tyapunina, N. A.—Internal Friction in Pure Tellurium Single Crystals (E)—G. B. Bagduev, A. M. Magdiev, E. K. Naimi and N. A. Tyapunina. 14(10), 2650–1(C) (Apr. 1973); CPM-7304E1296

Tychinskii, A. V.—Nature of the Spin Echo in Ferrites (E)—I. A. Deryugin, Yu. A. Nechiporuk and A. V. Tychinskii. 14(1), 264–5 (C) (Jul. 1972); CPM-7207D1223

Tyurin, A. V.—Relaxation Phenomena in Additively Colored KBr Crystals (E)—N. G. D'yachenko, A. V. Tyurin and A. S. Sheveleva. 14(10), 2648–9(C) (Apr. 1973); CPM-7304E1294

Tyutikov, A. M.—Delay in Secondary Electron Emission from Substances (E)—A. M. Tyutikov and V. K. Kozyrev. 14(6), 1605–6(C) (Dec. 1972); CPM-7212D0941

Tyutin, I. V.—Behavior of an Excitonic Insulator in a Magnetic Field (T)—Yu. V. Kopaev and I. V. Tyutin. 14(4), 960–2 (Oct. 1972); CPM-7210D0775

U

Uchastkin, V. I.—Self–Interaction of Finite–Amplitude Magnetoelastic Waves (E)—Dao Tkhu Nguyen, V. A. Krasil'nikov, S. B. Samorukov and V. I. Uchastkin. 14(10), 2632–3(C) (Apr. 1973); CPM-7304E1278

Ukhanov, Yu. I.—Temperature Dependence of Infrared Dispersion of Lattice Reflection in GaSb (E/T)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(11), 2838–40 (May 1973); CPM-7305D1066

—Multiphonon Absorption in Gallium Antimonide (E)—I. V. Skryabinskii and Yu. I. Ukhanov. 14(12), 3041–3 (Jun. 1973); CPM-7306D0883

Ukhlinov, G. A.—Resistometric and Electron–Microscope Investigation of the Mechanism of Growth of Bismuth Films (E)—V. N. Vigdorovich, G. A. Ukhlinov and D. V. Yakashvili. 14(9), 2370–1(C) (Mar. 1973); CPM-7303E1194

Ulmanis, U. A.—Radiation Stability of Semiconductors Having Stoichiometric Vacancies (E)—L. P. Gal'chinetskii, V. M. Koshkin, V. M. Kumakov, V. N. Kulik, M. I. Rudenko, P. M. Ryabka, U. A. Ulmanis, V. I. Shakhovtsov and V. L. Shindich. 14(2), 554–6 (C) (Aug. 1972); CPM-7208E0711

Ural'tsev, I. N.—Exchange Interaction and Zeeman Effect for an Exciton Bound to an Ionized Center in CdSe (T/E)—G. L. Bir, B. S. Razbirin and I. N. Ural'tsev. 14(2), 360–7 (Aug. 1972); CPM-7208E0517

Urusovskaya, A. A.—Spatial Decoration of Defects in CsI Crystals (E)—N. L. Sizova, M. O. Kliya, V. N. Rozhanskii and A. A. Urusovskaya. 14(3), 743–6 (Sep. 1972); CPM-7209D0177

Uskov, V. V.—Magnetic and Magnetoelastic Properties of $FeBO_3$ Single Crystals (E)—A. M. Kadomtseva, R. Z. Levitin, Yu. F. Popov, V. N. Seleznev and V. V. Uskov. 14(1), 172–4 (Jul. 1972); CPM-7207D1131

Usmanov, R. G.—Photon Echo in Ruby (E)—U. Kh. Kopvillem, V. R. Nagiberov, V. A. Pirozhkov, V. V. Samartsev and R. G. Usmanov. 14(6), 1544–5(C) (Dec. 1972); CPM-7212D0880

Usov, O. A.—Some Electronic Properties of Heavily Doped p–Type GaAs (E)—K. P. Abdurakhmanov, B. A. Kotov, N. M. Okuneva, E. L. Plachenova and O. A. Usov. 14(9), 2234–6 (Mar. 1973); CPM-7303E1058

Uspenskaya, G. I.—Spontaneous Change in the Radius of Curvature of Plastically Deformed Silicon Slices (E)—P. V. Pavlov, V. I. Pashkov, G. I. Uspenskaya and Z. N. Gurevich. 14(2), 537–8(C) (Aug. 1972); CPM-7208E0694

Ustinov, V. B.—Nuclear Magnetic Resonance of V^{51} Nuclei in Vanadium–Rich Fe–V Alloys (E)—S. P. Repnikov and V. B. Ustinov. 14(9), 2375–7(C) (Mar. 1973); CPM-7303E1199

Utevskii, L. M.—Substructure of Gallium Single Crystals Containing Additions (E)—E. F. Sidokhin, Yu. E. Matveev, V. I. Semenenko, L. M. Utevskii and V. T. Borisov. 14(2), 514–6(C) (Aug. 1972); CPM-7208E0671

—Slip Polygonization in Silicon Iron Single Crystals Deformed by Tensile Forces (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(4), 1075–6(C) (Oct. 1972); CPM-7210D0890

—Polygonization by Slip in Silicon Iron Single Crystals Deformed by Tension at −196°C (E)—E. F. Sidokhin, V. G. Kurdyumov and L. M. Utevskii. 14(8), 2110–1(C) (Feb. 1973); CPM-7302E1236

Uzhva, V. I.—Inductance of Impact–Ionized Plasma in Indium Antimonide (E/T)—V. N. Dobrovol'skii and V. I. Uzhva. 14(12), 2985–7 (Jun. 1973); CPM-7306D0827

V

Vaisfel'd, M. P.—Spin–Lattice Relaxation of Nuclei of Rare Earth Ions with a Singlet Electronic Ground State (T)—M. P. Vaisfel'd. 14(3), 628–31 (Sep. 1972); CPM-7209D0062

—Magnetic Resonance at Nuclei of Rare–Earth Ions Having a Nonmagnetic Doublet Ground State (T)—M. P. Vaisfel'd and M. A. Teplov. 14(9), 2243–5 (Mar. 1973); CPM-7303E1067

—Spin–Lattice Relaxation of Nuclei of Paramagnetic Ions (T)—M. P. Vaisfel'd. 14(12), 2996–9 (Jun. 1973); CPM-7306D0838

Vakulenko, O. V.—Impurity Absorption of Infrared Radiation in n–Type SiC(6H) (E)—O. V. Vakulenko, O. A. Govorova and B. M. Shutov. 14(1), 242(C) (Jul. 1972); CPM-7207D1201

—Infrared Absorption in α SiC(6H) Activated by Ultraviolet Background Illumination (E)—O. V. Vakulenko and O. A. Govorova. 14(12), 2939–41 (Jun. 1973); CPM-7306D0781

Valakh, M. Ya.—Possibility of Fermi Resonance between a Local Impurity Vibration and the Vibrations of the Host Lattice of a Crystal (E/T)—M. Ya Valakh, M. P. Lisitsa, N. E. Novoseletskii and A. M. Yaremko. 14(3), 702–5 (Sep. 1972); CPM-7209D0136

—Some Features of Exciton Effects in Layer Crystals (T/E)—M. P. Lisitsa, A. M. Yaremko, G. G. Tarasov, M. Ya. Valakh and L. I. Berezhinskii. 14(11), 2744–7 (May 1973); CPM-7305D0972

Valiev, A. A.—Temperature Dependences of the Elastic Constants of Bismuth (E)—Yu. A. Burenkov, A. A. Valiev, S. P. Nikanorov and A. V. Stepanov. 14(1), 215–6(C) (Jul. 1972); CPM-7207D1174

Valitova, N. R.—Nonlinear Effects in the Propagation of Finite–Amplitude Hypersonic Waves in Ferroelectric Crystals (T/E)—N. R. Valitova and K. V. Goncharov. 14(3), 768–70(C) (Sep. 1972); CPM-7209D0202

Varisov, A. Z.—Positron Centers in Defective Ionic Crystals (T)—A. Z. Varisov and E. P. Prokop'ev. 14(2), 493–5(C) (Aug. 1972); CPM-7208E0650

—Positronium Atom in Ionic Crystals with NaCl–Type Lattice (E)—G. M. Bartenev, A. Z. Varisov, A. V. Ivanova, M. N. Pletnev, E. P. Prokop'ev and A. D. Tsyganov. 14(3), 608–12 (Sep. 1972); CPM-7209D0042

Vashchenko, G. A.—Absorption Spectra and Optical Transitions in AsI_3 Single Crystals (E)—V. I. Vashchenko, V. N. Kolosyuk and G. A. Vashchenko. 14(12), 3068–70 (Jun. 1973); CPM-7306D0910

Vashchenko, V. I.—Absorption Spectra and Optical Transitions in AsI_3 Single Crystals (E)—V. I. Vashchenko, V. N. Kolosyuk and G. A. Vashchenko. 14(12), 3068–70 (Jun. 1973); CPM-7306D0910

Vashkovskii, A. V.—Anisotropy of the Magnetoelastic Instability in Crystals (T)—V. D. Burkov and A. V. Vashkovskii. 14(10), 2489–92 (Apr. 1973); CPM-7304E1135

Vasil'ev, A. I.—Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskis, E. I. Balabanov and A. I. Vasil'ev. 14 (12), 3028–31 (Jun. 1973); CPM-7306D0870

Vasil'ev, G. G.—Magnetooptical Resonance in Manganese Ferrite in the Visible Spectral Region (E)—A. V. Malakhovskii, I. S. Édel'man and G. G. Vasil'ev. 14(3), 681–3 (Sep. 1972); CPM-7209D0115

Vasil'ev, L. N.—Investigation of the Effects of the Glass—Crystal Transition on the Local Surroundings of ^{119}Sn Impurity Atoms in As_2Te_3 and in As_2Se_3–As_2Te_3 Based on the Mössbauer Effect (E)—P. P. Seregin and L. N. Vasil'ev. 14(5), 1325–6(C) (Nov. 1972); CPM-7211A1577

Vasil'ev, N. N.—Formation of Molecular Impurity Centers and Complexes During Electrolysis of Potassium Chloride (E)—Ya. N. Pershits and N. N. Vasil'ev. 14(11), 2898–9(C) (May 1973); CPM-7305D1126

Vasil'ev, V. A.—Plasma Oscillations in Transition Metals and Alloys (T/E)—E. A. Bakulin, M. M. Brodov and V. A. Vasil'ev. 14(8), 2100–3 (Feb. 1973); CPM-7302E1226

Vasil'eva, N. V.—Microstructure of Domains and Domain Walls in Single–Crystal Films of Barium Titanate (E)—S. I. Yakunin, V. V. Shakmanov, G. V. Spivak and N. V. Vasil'eva. 14(2), 310–3 (Aug. 1972); CPM-7208E0467

Vasil'eva, T. I.—Optical Properties of $FeBO_3$ in the Strong Absorption Region (E)—I. S. Édel'man, A. V. Malakhovskii, T. I. Vasil'eva and V. N. Seleznev. 14(9), 2442–4(C) (Mar. 1973); CPM-7303E1266

Vas'ko, F. T.—Electrooptical Effect due to Virtual Interband Transitions (T)—F. T. Vas'ko. 14(12), 3081–2(C) (Jun. 1973); CPM-7306D0923

Vedenov, A. A.—Surface Faceting of Single Crystals (T)—L. A. Bol'shov and A. A. Vedenov. 14(4), 864–7 (Oct. 1972); CPM-7210D0679

Veisig, G. S.—Anomalous Change of Polar Kerr Effect in Nickel and Iron in a Strong Magnetic Field (E/T)—I. S. Édel'man, A. V. Malakhovskii, T. P. Morozova, A. T. Slivinskaya and G. S. Veisig. 14(11), 2770–2 (May 1973); CPM-7305D0998

Vekhter, B. G.—Reduction Factors of Jahn–Teller Systems (T)—V. Z. Polinger, Yu. B. Rozenfel'd, B. S. Tsukerblat and B. G. Vekhter. 14(8), 2165–7(C) (Feb. 1973); CPM-7302E1291

—Effects of Vibron Reduction of the Coulomb and Exchange Interactions in Impurity Pairs (T)—B. S. Tsukerblat and B. G. Vekhter. 14(9), 2204–8 (Mar. 1973); CPM-7303E1028

Vekilov, Yu. Kh.—Relationship between Elastic Moduli at Finite Temperatures (T)—Yu. Kh. Vekilov, O. M. Krasil'nikov and Yu. A. Lisovskii. 14(10), 2634–5(C) (Apr. 1973); CPM-7304E1280

Veksler, V. I.—Energy Spectra of W^+ and Mo^+ Ions Obtained in the Sputtering of Tungsten–Molybdenum Alloys (E)—A. A. Adylov, V. I. Veksler, A. M. Reznik and S. A. Furer. 14(2), 396–8 (Aug. 1972); CPM-7208E0553

—Angular Dependences of the Energy Spectra of the Ion Component in the Cathodic Sputtering of Polycrystalline Molybdenum with Cs^+ Ions (E)—A. A. Adylov, V. I. Veksler and A. M. Reznik. 14 (11), 2696–9 (May 1973); CPM-7305D0924

Velichko, I. A.—Electrical and Thermal Properties of Mixed Crystals of Ferroelectric $KH_{2(1-x)}D_{2x}PO_4$ (E)—B. A. Strukov, A. Baddur, V. A. Koptsik and I. A. Velichko. 14(4), 885–9 (Oct. 1972); CPM-7210D0700

Velikodnyi, A. I.—Dynamics of Vibrations of Sn^{119} Nuclei in Dilute Tin–Base Alloys (E)—V. V. Chekin, A. I. Velikodnyi, S. N. Glushko and E. D. Semenova. 14(2), 479–80(C) (Aug. 1972); CPM-7208E0636

Venttsel', V. A.—Semimetal–Semiconductor Transition in Bismuth under the Influence of Pressure (E)—V. A. Venttsel' and A. V. Rakhmanina. 14(9), 2325–7 (Mar. 1973); CPM-7303E1149

Vereshchagin, L. F.—Retaining the Metastable High–Pressure Phases of CdS, Mg_2Sn, SnTe, and SnTe–GeTe Alloys (E)—Z. V. Malyushitskaya, S. S. Kabalkina and L. F. Vereshchagin. 14(4), 1040–5 (Oct. 1972); CPM-7210D0855

Vereshchak, M. F.—Mössbauer Effect in Impurity Atoms of Fe^{57} in Quartz Single Crystals (E)—M. F. Vereshchak, A. K. Zhetbaev, D. K. Kaipov and K. K. Satpaev. 14(10), 2638–9(C) (Apr. 1973); CPM-7304E1284

Verkelis, I. Yu.—β Modification of In_2Te_3 (E)—I. Yu. Verkelis. 14 (6), 1445–7 (Dec. 1972); CPM-7212D0781

Vershok, B. A.—Nonconservative Motion of Dislocations near Grain Boundaries Which Are Sources or Sinks of Vacancies (T)—A. L. Roitburd and B. A. Vershok. 14(11), 2818–21 (May 1973); CPM-7305D1046

Vertsimakha, Ya. I.—Temperature Dependence of the Photoconductivity Spectrum of Anthracene (E/T)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(5), 1241–4 (Nov. 1972); CPM-7211A1493

—Photovoltaic Effect in Anthracene Crystals (E)—Ya. I. Vertsimakha, M. V. Kurik and Yu. P. Piryatinskii. 14(8), 2035–9 (Feb. 1973); CPM-7302E1161

Veselovskaya, N. V.—Anomalous Transmission of X Rays by Silicon Single Crystals Containing Dislocations (E)—E. G. Sheikhet, O. N. Efimov and N. V. Veselovskaya. 14(1), 223–4(C) (Jul. 1972); CPM-7207D1182

Veshchunov, Yu. P.—Optical Orientation of Excitons and the Hanley Effect in Gallium Selenide (E)—Yu. P. Veshchunov, B. P. Zakharchenya and E. M. Leonov. 14(9), 2312–4 (Mar. 1973); CPM-7303E1136

Viblyi, I. F.—Temperature Variation of the Optic Angle in Rochelle Salt Crystals (E)—I. F. Viblyi. 14(8), 2133–4(C) (Feb. 1973); CPM-7302E1259

Vigdorovich, V. N.—Resistometric and Electron-Microscope Investigation of the Mechanism of Growth of Bismuth Films (E)—V. N. Vigdorovich, G. A. Ukhlinov and D. V. Yakashvili. 14(9), 2370–1(C) (Mar. 1973); CPM-7303E1194

Vikhnin, V. S.—Acoustic Resonance in Crystals with Noncentral Impurity Ions (T)—V. S. Vikhnin. 14(9), 2414–5(C) (Mar. 1973); CPM-7303E1238

Vilesov, F. I.—Photoionization of Molecules of Anthracene and Its Methyl Derivatives Embedded in Polymethylmethacrylate (E)—F. I. Vilesov and D. A. Sukhov. 14(8), 2069–72 (Feb. 1973); CPM-7302E1195

Vinetskii, V. L.—Theory of Quasistationary Reactions between Point Defects in Crystals (T)—V. L. Vinetskii and I. I. Yaskovets. 14 (10), 2605–9 (Apr. 1973); CPM-7304E1251

Vinogradov, A. A.—Electrical Conductivity of Vanadium Oxide Bronzes in the Liquid and Solid States (E)—A. A. Vinogradov, A. A. Andreev and A. I. Shelykh. 14(4), 1077–9(C) (Oct. 1972); CPM-7210D0892

Vinogradov, E. A.—Optical Phonons in a System of $Zn_xCd_{1-x}Te$ Mixed Crystals (E)—L. K. Vodop'yanov, E. A. Vinogradov, A. M. Blinov and V. A. Rukavishnikov. 14(1), 219–20(C) (Jul. 1972); CPM-7207D1178

Vinogradov, I. A.—Study of Iron Atom Vibrations in Vivianite and Pyrite Crystals Using Mössbauer Spectroscopy (E)—I. P. Suzdalev, I. A. Vinogradov and V. K. Imshennik. 14(5), 1136–42 (Nov. 1972); CPM-7211A1388

Vinokurova, L. I.—Effect of Pressure on Galvanomagnetic Phenomena in Rare Earth Metals (E)—L. I. Vinokurova, E. I. Kondorskii, Kh. Rakhimova and V. Yu. Ivanov. 14(3), 613–9 (Sep. 1972); CPM-7209D0047

—Influence of Pressure on the Hall Effect in Dysprosium Single Crystals (E)—L. I. Vinokurova, E. I. Kondorskii, V. Yu. Ivanov, V. M. Murav'eva and Kh. Rakhimova. 14(12), 2981–4 (Jun. 1973); CPM-7306D0823

Vitol, I. K.—Ionization of In^+ and Tl^+ Centers in KCl and KBr Crystals by Interstitial Halogen Atoms (E)—I. K. Vitol, V. Ya. Grabovskis, S. G. Zazubovich and Ch. B. Lushchik. 14(4), 894–8 (Oct. 1972); CPM-7210D0709

Vladimirov, V. I.—Stress Dependence of the Activation Energy for Rupture Processes (T)—V. I. Vladimirov. 14(8), 1969–75 (Feb. 1973); CPM-7302E1095

Vlasov, G. K.—Theory of Indirect Magnetooptical Transitions due to Inelastic Carrier–Impurity Interaction (T)—G. K. Vlasov. 14(5), 1160–3 (Nov. 1972); CPM-7211A1412

—Effect of Inelastic Interaction of Carriers on the Absorption of Light in Semiconductors (T)—G. K. Vlasov. 14(7), 1794–800 (Jan. 1973); CPM-7301C0754

—Light Absorption by Free Carriers Due to Interactions between Them (T)—G. K. Vlasov, V. S. Mashkevich and E. A. Timonina. 14(11), 2870–4 (May 1973); CPM-7305D1098

Vlasova, R. M.—Thermal Conductivity of Ion-Radical Salts of Tetracyanoquinodimethane (E)—A. V. Petrov, Yu. G. Nurullaev, R. M. Vlasova, V. V. Kuzina and A. I. Sherle. 14(6), 1594–5(C) (Dec. 1972); CPM-7212D0930

Vodop'yanov, L. K.—Optical Phonons in a System of $Zn_xCd_{1-x}Te$ Mixed Crystals (E)—L. K. Vodop'yanov, E. A. Vinogradov, A. M. Blinov and V. A. Rukavishnikov. 14(1), 219–20(C) (Jul. 1972); CPM-7207D1178

Volchok, O. I.—Effect of Ultrasonic Irradiation on the Development of Twinning in Cadmium (E)—I. A. Gindin, O. I. Volchok and I. M. Neklyudov. 14(11), 2762–3 (May 1973); CPM-7305D0990

Volk, T. R.—Influence of Illumination on the Domain Structure and the Curie Temperature of $BaTiO_3$ (E)—T. R. Volk, A. A. Grekov, N. A. Kosonogov and V. M. Fridkin. 14(11), 2740–3 (May 1973); CPM-7305D0968

Volkov, N. G.—Determination of the Shapes of the Potential Wells of Traps Using the Frenkel Thermal–Field Effect (T)—N. G. Volkov and V. K. Lyapidevskii. 14(5), 1149–52 (Nov. 1972); CPM-7211A1401

Volkova, N. V.—Magnetostriction of Cerium-Substituted Yttrium Iron Garnets (E)—K. P. Belov, N. V. Volkova, V. I. Raitsis and A. Ya. Chervonenkis. 14(6), 1607–9(C) (Dec. 1972); CPM-7212D0943

Volobuev, P. V.—Diffusion and Solubility of Helium in NaCl Crystals (E)—N. N. Alekseenko, P. V. Volobuev and P. E. Suetin. 14(8), 2073–5 (Feb. 1973); CPM-7302E1199

Volodin, V. P.—Dynamic Elasticity of Polyolefins (E/T)—Yu. A. Antsupov, V. P. Volodin, E. V. Kuvshinskii and Yu. N. Fedorov. 14(4), 952–4 (Oct. 1972); CPM-7210D0767

Volokitin, A. I.—Low-Energy Electron Diffraction from a (111) Germanium Surface During the Early Stages of Oxygen Adsorption (E)—B. Z. Ol'shanetskii, N. I. Makrushin and A. I. Volokitin. 14(11), 2713–6 (May 1973); CPM-7305D0941

Vorob'ev, A. A.—Formation of Cavities During Breakdown of Ionic Crystals (E)—A. A. Vorob'ev and L. T. Murashko. 14(1), 207–8 (C) (Jul. 1972); CPM-7207D1166

—Temperature Dependence of Positron Annihilation in a Metal (T)—A. A. Vorob'ev and K. P. Aref'ev. 14(4), 906–7 (Oct. 1972); CPM-7210D0721

—Electron Scattering by Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14(7), 1864–5(C) (Jan. 1973); CPM-7301C0824

—Orientation Effects of β-Particle Scattering in Large-Thickness Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14(11), 2808–11 (May 1973); CPM-7305D1036

Vorob'ev, S. A.—Electron Scattering by Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14 (7), 1864–5(C) (Jan. 1973); CPM-7301C0824

—Orientation Effects of β-Particle Scattering in Large-Thickness Single Crystals (E)—A. A. Vorob'ev, A. Ya. Bobudaev, S. A. Vorob'ev and V. V. Kaplin. 14(11), 2808–11 (May 1973); CPM-7305D1036

Voron'ko, Yu. K.—Color Centers in $Y_3Al_5O_{12}$ Crystals (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker, A. A. Maier, V. V. Osiko, V. S. Radyukhin and M. I. Timoshechkin. 14(4), 839–41 (Oct. 1972); CPM-7210D0654

—Recombination Luminescence in the Crystals $Y_3Al_5O_{12}$–TR_{II}, TR_I (E)—S. Kh. Batygov, Yu. K. Voron'ko, B. I. Denker and V. V. Osiko. 14(7), 1820–2 (Jan. 1973); CPM-7301C0780

—Study of the Processes of Deactivation of the Metastable State of Excited Nd^{3+} Ions in LaF_3 Crystals (E)—Yu. K. Voron'ko, V. V. Osiko, N. V. Savost'yanova, V. S. Fedorov and I. A. Shcherbakov. 14(9), 2294–9 (Mar. 1973); CPM-7303E1118

Vorontsov-Vel'yaminov, P. N.—Phase Diagram of the Three-Dimensional Ising Model Involving the Interaction of First and Second Neighbors (T)—P. N. Vorontsov-Vel'yaminov, N. B. Gromova and I. A. Favorskii. 14(2), 490–2(C) (Aug. 1972); CPM-7208E0647

—Influence of Dipole-Dipole Interaction on the Relaxation Properties of a Simple Model of a Dielectric (T)—P. N. Vorontsov-Vel'yaminov, A. M. El'yashevich and I. A. Favorskii. 14(3), 678–80 (Sep. 1972); CPM-7209D0112

Vorotneva, L. V.—Dependence of Angular Distribution of Electrons Inelastically Scattered by Metals upon Their Energy (E/T)—L. V. Vorotneva and L. G. Eliseenko. 14(11), 2751–3 (May 1973); CPM-7305D0979

Vorov, Yu. G.—Heavy Conduction Electron Band in Bismuth (E)—A. A. Averkin, Yu. G. Vorov, G. A. Ivanov, V. I. Korishev and A. R. Regel'. 14(4), 971–4 (Oct. 1972); CPM-7210D0786

Vovsi, A. I.—Mechanical Strains in Vacuum-Deposited CdTe Films (E)—A. I. Vovsi, L. P. Strakhov and O. A. Yakovuk. 14(5), 1251–4 (Nov. 1972); CPM-7211A1503

—Changes in Mechanical Stress of Cadmium Telluride Thin Films Caused by Photostimulated Adsorption of Oxygen (E)—A. I. Vovsi and L. I. Straklov. 14(11), 2863–5 (May 1973); CPM-7305D1091

Vugal'ter, G. A.—Relaxation of the Fluctuations of Magnetization in Ferromagnets above the Curie Point (T)—G. A. Vugal'ter and S. V. Maleev. 14(11), 2764–6 (May 1973); CPM-7305D0992

Vugmeister, B. E.—EPR Line Shape in the Presence of the Spin–Phonon and Static Portions of Dipole–Dipole Interactions (T)—B. E. Vugmeister, V. L. Gokhman and V. Ya. Zevin. 14(9), 2280–4 (Mar. 1973); CPM-7303E1104

Vul, B. M.—Dependence of the Piezoeffect in Barium Titanate on the Means of Screening the Spontaneous Induction (T)—B. M. Vul, G. M. Guro and I. I. Ivanchik. 14(3), 602–7 (Sep. 1972); CPM-7209D0036

Vylegzhanin, D. N.—Electron–Phonon Interaction in $Y_3Al_5O_{12}$–Nd^{3+} (T)—I. S. Andriesh, V. Ya. Gamurar', D. N. Vylegzhanin, A. A. Kaminskii, S. I. Klokishner and Yu. E. Perlin. 14(10), 2550–8 (Apr. 1973); CPM-7304E1196

Vysoven', L. M.—Inelastic Phenomena in Sodium Chloride Whiskers (E)—L. B. Zuev, V. D. Mal'tsev, L. M. Vysoven' and V. A. Stupin. 14(4), 1096–7(C) (Oct. 1972); CPM-7210D0911

Y

Yablokov, Yu. V.—Exchange Interactions in Symmetrical Triads of Paramagnetic Ions (T)—V. A. Gaponenko, M. V. Eremin and Yu. V. Yablokov. 14(11), 2884–5(C) (May 1973); CPM-7305D1112

Yablonskii, D. A.—Critical Scattering of Neutrons in Ferrites and Antiferromagnets in a Magnetic Field (T)—V. G. Bar'yakhtar, V. V. Tarasenko and D. A. Yablonskii. 14(8), 2006–9 (Feb. 1973); CPM-7302E1132

—Quantum Theory of an Isotropic Two–Sublattice Ferrimagnet in Applied Magnetic Fields (T)—D. A. Yablonskii. 14(10), 2468–74 (Apr. 1973); CPM-7304E1114

—Coupled Magnetoelastic Waves in Ferrites in Applied Magnetic Fields (T)—V. G. Bar'yakhtar and D. A. Yablonskii. 14(12), 3044–7 (Jun. 1973); CPM-7306D0886

Yakashvili, D. V.—Resistometric and Electron–Microscope Investigation of the Mechanism of Growth of Bismuth Films (E)—V. N. Vigdorovich, G. A. Ukhlinov and D. V. Yakashvili. 14(9), 2370–1(C) (Mar. 1973); CPM-7303E1194

Yakimov, S. S.—Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

—Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14(2), 530–2(C) (Aug. 1972); CPM-7208E0687

—"Magnetic Anomaly" of the Probability of the Mössbauer Effect in Invar (E)—V. M. Belova, E. A. Brychkov, E. K. Zakharov, V. I. Nikolaev and S. S. Yakimov. 14(9), 2404–5(C) (Mar. 1973); CPM-7303E1228

Yakovenko, V. M.—Helicon Instability in Solid–State Plasma (T)—V. M. Yakovenko. 14(1), 249–50(C) (Jul. 1972); CPM-7207D1208

—Overheating Instability of Helicons in Finite Semiconductors (T)—A. P. Tetervov and V. M. Yakovenko. 14(9), 2220–3 (Mar. 1973); CPM-7303E1044

Yakover, I. M.—Fluctuations of Hot Photoelectrons in Semiconductors (T)—L. Ya. Kashchenevskii and I. M. Yakover. 14(8), 1953–5 (Feb. 1973); CPM-7302E1079

Yakovlev, E. N.—Dependence of the Magnetic Anisotrophy of Yttrium Iron Garnet on Pressure and Temperature (E/T)—Yu. A. Timofeev, E. N. Yakovlev and A. N. Ageev. 14(5), 1131–5 (Nov. 1972); CPM-7211A1383

—Mössbauer Effect and Superconductivity of Tin under Pressure (T/E)—V. N. Panyushkin and E. N. Yakovlev. 14(6), 1579–80(C) (Dec. 1972); CPM-7212D0915

—Influence of High Pressure on Anisotropy Anomalies in Tb^{3+}–Doped Yttrium Iron Garnet (E/T)—Yu. A. Timofeev, E. N. Yakovlev, A. G. Gurevich and A. N. Ageev. 14(11), 2835–7 (May 1973); CPM-7305D1063

Yakovlev, V. A.—Debye Temperatures of LiF, NaF, and KI (T/E)—V. V. Panchenko and V. A. Yakovlev. 14(10), 2616(C) (Apr. 1973); CPM-7304E1262

Yakovlev, V. N.—Anisotropic Surface Structure Change in Refractory Metal Crystals During Directional Transport Processes (E/T)—I. V. Zakurdaev, E. Ya. Chernyak, G. N. Shuppe and V. N. Yakovlev. 14(12), 2977–80 (Jun. 1973); CPM-7306D0819

Yakovlev, Yu. M.—Optical Anisotropy and Cylindrical Domains in $(Gd,Tb,Eu)_3FeO_{12}$ Ferrite Garnets (E)—R. V. Pisarev, N. N. Kolpakova, Yu. M. Yakovlev, V. S. Filonich and A. G. Titova. 14(2), 300–2 (Aug. 1972); CPM-7208E0457

—Nuclear–Gamma–Resonance Study of the Magnetic Anisotropy of Yttrium Iron Garnet (E/T)—G. N. Belozerskii, Yu. P. Khimich and Yu. M. Yakovlev. 14(4), 993–6 (Oct. 1972); CPM-7210D0808

—Excitation of Magnetoelastic Waves in a Magnesium Spinel Single Crystal (E)—S. A. Mironov, L. Smoczynski, E. V. Rubal'skaya and Yu. M. Yakovlev. 14(6), 1612–4(C) (Dec. 1972); CPM-7212D0948

Yakovleva, Zh. S.—Impurity Centers in NH_4Cl Crystals Activated with Iron Group Ions (E/T)—A. L. Stolov and Zh. S. Yakovleva. 14(7), 1810–2 (Jan. 1973); CPM-7301C0770

Yakovuk, O. A.—Mechanical Strains in Vacuum–Deposited CdTe Films (E)—A. I. Vovsi, L. P. Strakhov and O. A. Yakovuk. 14(5), 1251–4 (Nov. 1972); CPM-7211A1503

Yakshinskii, B. V.—Determination of the Kinetic Characteristics of the Desorption of Lanthanum and Neodymium Atoms and Ions from the (001) Face of Tungsten by the Temperature Modulation Method (E/T)—N. I. Ionov, Ts. S. Marinova and B. V. Yakshinskii. 14(11), 2717–20 (May 1973); CPM-7305D0945

Yakunin, S. I.—Microstructure of Domains and Domain Walls in Single–Crystal Films of Barium Titanate (E)—S. I. Yakunin, V. V. Shakmanov, G. V. Spivak and N. V. Vasil'eva. 14(2), 310–3 (Aug. 1972); CPM-7208E0467

Yalovets, T. N.—Anomalous Intensity of Exciton–Impurity Absorption in CdS Crystals (E)—V. B. Timofeev and T. N. Yalovets. 14(2), 399–403 (Aug. 1972); CPM-7208E0556

Yamaleev, K. M.—Determination of the Composition of Guinier–Preston Zones by the Method of Relative Intensities of Diffuse Effects (E/T)—V. M. Agishev and K. M. Yamaleev. 14(2), 279–82 (Aug. 1972); CPM-7208E0436

Yanchevskaya, I. S.—Model of Irradiation–Produced ESR Centers in Aluminosilicates (T/E)—V. S. Grunin, V. A. Ioffe and I. S. Yanchevskaya. 14(7), 1839–41(C) (Jan. 1973); CPM-7301C0799

Yanter, A. I.—Relationship between the Barkhausen Effect and the State of Defects in Ferroelectric Semiconductor SbSI (E)—V. M. Rudyak, A. A. Bogomolov, V. V. Ivanov and A. I. Yanter. 14(10), 2646–7(C) (Apr. 1973); CPM-7304E1292

Yaremko, A. M.—Possibility of Fermi Resonance between a Local Impurity Vibration and the Vibrations of the Host Lattice of a Crystal (E/T)—M. Ya Valakh, M. P. Lisitsa, N. E. Novoseletskii and A. M. Yaremko. 14(3), 702–5 (Sep. 1972); CPM-7209D0136

—Some Features of Exciton Effects in Layer Crystals (T/E)—M. P. Lisitsa, A. M. Yaremko, G. G. Tarasov, M. Ya. Valakh and L. I. Berezhinskii. 14(11), 2744–7 (May 1973); CPM-7305D0972

Yas'ko, A. A.—Structure of Lead Films on a Tungsten (100) Surface (E)—D. A. Gorodetskii and A. A. Yas'ko. 14(3), 636–8 (Sep. 1972); CPM-7209D0070

Yas'kov, D. A.—Linear Electrooptical Effect in Gallium Phosphide (E)—G. F. Glinskii, A. N. Pikhtin and D. A. Yas'kov. 14(2), 291–4 (Aug. 1972); CPM-7208E0448

Yaskovets, I. I.—Theory of Quasistationary Reactions between Point Defects in Crystals (T)—V. L. Vinetskii and I. I. Yaskovets. 14(10), 2605–9 (Apr. 1973); CPM-7304E1251

Yassievich, I. N.—Distribution Function and Energy Losses of Hot Electrons Interacting with Optical Phonons (T)—B. L. Gel'mont, R. I. Lyagushchenko and I. N. Yassievich. 14(2), 445–52 (Aug. 1972); CPM-7208E0602

Yastrebinskii, A. A.—Accelerating Effect of Ultraviolet Radiation on Submicroscopic Crack Formation in Loaded Polymers (E)—Kh. Akimbekov, V. S. Kuksenko, S. Nizamidinov, A. I. Slutsker and A. A. Yastrebinskii. 14(9), 2339–43 (Mar. 1973); CPM-7303E1163

Yatsuk, L. A.—Transformation of the "Amorphous" Phase of Bismuth Thin Films into the Crystalline Phase at Small Thicknesses (E)—B. I. Belevtsev, Yu. F. Komnik and L. A. Yatsuk. 14(7), 1887–8(C) (Jan. 1973); CPM-7301C0847

Yudin, V. M.—Magnetization and Ferromagnetic Resonance in $Y_3Fe_{5-(x+y)}Al_xGa_yO_{12}$ Ferrite Garnets (E)—V. M. Yudin, V. K. Pukhova, O. B. Proskuryakov, V. P. Polyakov and S. A. Poltinnikov. 14(2), 547–8(C) (Aug. 1972); CPM-7208E0704

—Natural Ferromagnetic Resonance in the Garnets $Y_3Fe_{5-x}Al_xO_{12}$ (E/T)—S. A. Poltinnikov, V. P. Polyakov, O. B. Proskuryakov, V. K. Pukhova and V. M. Yudin. 14(3), 777–8(C) (Sep. 1972); CPM-7209D0211

Yugova, T. G.—Precipitation of Copper in GaAs Single Crystals (E)—L. M. Morgulis, M. G. Mil'vidskii, V. B. Osvenskii and T. G. Yugova. 14(9), 2436–8(C) (Mar. 1973); CPM-7303E1260

Yur'ev, M. S.—Phonon–Phonon Scattering and High–Temperature Lattice Thermal Conductivity (T/E)—Yu. A. Logachev and M. S. Yur'ev. 14(11), 2826–31 (May 1973); CPM-7305D1054

Yushin, N. K.—Generation of Harmonics of Transverse Elastic Waves in Crystals (E)—V. V. Lemanov and N. K. Yushin. 14(8), 2053–6 (Feb. 1973); CPM-7302E1179

Yushina, G. G.—Effective Magnetic Fields at Sn^{119} Nuclei in Some Magnetically Ordered Perovskites (E)—V. A. Bokov, G. V. Popov, N. N. Parfenova and G. G. Yushina. 14(1), 83–6 (Jul. 1972); CPM-7207D1042

Yutsis, A. I.—Acoustoresistance of Thin Polycrystalline CdS Films (E)—A. P. Sereika, É. P. Garshka, A. I. Yutsis and A. V. Alishauskas. 14(9), 2419–21(C) (Mar. 1973); CPM-7303E1243

Z

Zagarii, L. B.—Effect of Dislocations on the Anomalous Transmission of X Rays in Zn and KCl Crystals (E)—É. F. Chaikovskii and L. B. Zagarii. 14(5), 1340–1(C) (Nov. 1972); CPM-7211A1592

Zagoruiko, N. V.—Electromechanical Effect on Ionic Crystals (E)—N. V. Zagoruiko, V. I. Savenko and N. N. Bekkauer. 14(8), 2120–2(C) (Feb. 1973); CPM-7302E1246

Zainutdinov, S. D.—Switching Effect in Molten Oxides Sb_2O_3 and B_2O_3 (E)—A. A. Andreev, S. D. Zainutdinov, B. T. Melekh, T. Turgunov and E. A. Shmuratov. 14(12), 3102–3(C) (Jun. 1973); CPM-7306D0944

Zaitov, F. A.—Investigation of the Diffusion of Impurities in Mercury Telluride (E)—F. A. Zaitov, V. I. Stafeev and G. S. Khodakov. 14(10), 2628–9(C) (Apr. 1973); CPM-7304E1274

Zaitsev, R. O.—Dielectric Losses in Polycrystalline Solids (T)—B. Ya. Balagurov and R. O. Zaitsev. 14(1), 41–6 (Jul. 1972); CPM-7207D1000

Zaitsev, S. I.—Kinetics of Motion of Slip Bands in NaCl Crystals (E)—S. I. Zaitsev and É. M. Nadgornyi. 14(11), 2787–90 (May 1973); CPM-7305D1015

Zaitsev, V. K.—Poole–Frenkel Effect in β Rhombohedral Boron (E)—A. A. Berezin, V. K. Zaitsev, M. M. Kazanin and E. N. Tkalenko. 14(9), 2445–6(C) (Mar. 1973); CPM-7303E1269

Zakharchenya, B. P.—Self–Focusing of the Radiation of an Argon Laser in $Bi_{12}GeO_{20}$ by Means of Raman Scattering (E)—B. Kh. Bairamov, B. P. Zakharchenya and Z. M. Khashkhozhev. 14(5), 1181–8 (Nov. 1972); CPM-7211A1433

—Optical Orientation of Excitons and the Hanley Effect in Gallium Selenide (E)—Yu. P. Veshchunov, B. P. Zakharchenya and E. M. Leonov. 14(9), 2312–4 (Mar. 1973); CPM-7303E1136

—Self–Focusing of Argon–Laser Radiation in $Bi_{12}SiO_{20}$ Crystals (E)—B. Kh. Bairamov, B. P. Zakharchenya and Z. M. Khashkhozhev. 14(9), 2357–62 (Mar. 1973); CPM-7303E1181

Zakharov, E. K.—"Magnetic Anomaly" of the Probability of the Mössbauer Effect in Invar (E)—V. M. Belova, E. A. Brychkov, E. K. Zakharov, V. I. Nikolaev and S. S. Yakimov. 14(9), 2404–5(C) (Mar. 1973); CPM-7303E1228

Zakharov, V. E.—Transient Behavior of a System of Parametrically Excited Spin Waves (T)—V. E. Zakharov, V. S. L'vov and S. L. Musher. 14(3), 710–5 (Sep. 1972); CPM-7209D0144

—Parametric Excitation of Spin Waves in Ferromagnets with Magnetic Inhomogeneities (T)—V. E. Zakharov and V. S. L'vov. 14(10), 2513–9 (Apr. 1973); CPM-7304E1159

Zakharov, V. P.—Optical Phonons in Amorphous Films of Arsenic Chalcogenides (E)—V. P. Zakharov, V. S. Gerasimenko and L. P. Kucherenko. 14(8), 2138–9(C) (Feb. 1973); CPM-7302E1264

Zakrevskii, V. A.—Paramagnetic Centers Produced by Mechanical Destruction of Silica (E/T)—K. A. Akhmed–zade, V. V. Baptizmanskii, V. A. Zakrevskii and É. E. Tomashevskii. 14(2), 351–4 (Aug. 1972); CPM-7208E0508

Zakurdaev, I. V.—Anisotropic Surface Structure Change in Refractory Metal Crystals During Directional Transport Processes (E/T)—I. V. Zakurdaev, E. Ya. Chernyak, G. N. Shuppe and V. N. Yakovlev. 14(12), 2977–80 (Jun. 1973); CPM-7306D0819

Zanadvorov, P. N.—Alternating–Current Field Effect in Organic Semiconductors (E)—M. L. Petrova and P. N. Zanadvorov. 14(6), 1581–2(C) (Dec. 1972); CPM-7212D0917

—Optical Detection in Lithium Iodate Crystals (E)—P. N. Zanadvorov, V. M. Moldavskaya and T. D. Levitskaya. 14(9), 2424–5(C) (Mar. 1973); CPM-7303E1248

Zandberg, É. Ya.—Work Function of Film Systems and Heat of Desorption of Particles from a Film (E)—É. Ya. Zandberg and A. Ya. Tontegode. 14(7), 1850–2(C) (Jan. 1973); CPM-7301C0810

Zapasskii, V. S.—Spin–Lattice Relaxation Mechanisms in the Crystal CaF_2–Dy^{3+} (I) (E)—V. S. Zapasskii. 14(4), 1069–70(C) (Oct. 1972); CPM-7210D0884

Zaporozhets, V. V.—Residual Action of High Pressure on the Width of Ferromagnetic Resonance Lines in $Y_3Fe_{5-x}Ga_xO_{12}$ Single Crystals (E)—V. A. Korchin, V. A. Ruban, V. V. Danilov and V. V. Zaporozhets. 14(5), 1329–30(C) (Nov. 1972); CPM-7211A1581

Zaprudskii, V. M.—Effect of Domain Structure on the Behavior of Thermodynamic Parameters near a Critical Point (T)—V. S. Esipov, V. M. Zaprudskii and M. A. Mikulinskii. 14(1), 9–13 (Jul. 1972); CPM-7207D0968

Zaripov, M. M.—Influence of Temperature on the ESR Spectrum of Mn^{2+} in Cs_2SO_4 (E)—R. Yu. Abdulsabirov, Yu. S. Greznev, M. M. Zaripov and V. G. Stepanov. 14(6), 1569–70(C) (Dec. 1972); CPM-7212D0905

—Influence of a Phase Transition of the First Kind on the ESR Spectrum of Mn^{2+} in $(NH_4)_2SO_4$ (E)—R. Yu. Abdulsabirov, Yu. S. Greznev and M. M. Zaripov. 14(11), 2894–5(C) (May 1973); CPM-7305D1122

—Exchange–Coupled Pairs of Mn^{2+} Ions in NaCl (E)—R. L. Garifullina, M. M. Zaripov, V. G. Stepanov and Yu. N. Tolparov. 14(12), 2959–61 (Jun. 1973); CPM-7306D0801

Zarubin, E. P.—Screw Instability in Germanium at Low Temperatures (E)—M. K. Balakirev, A. L. Belostotskii, S. V. Bogdanov and E. P. Zarubin. 14(3), 589–91 (Sep. 1972); CPM-7209D0023

Zarubin, V. N.—Statistical Angular Spin Configurations in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E/T)—V. I. Nikolaev, S. S. Yakimov, F. I. Popov and V. N. Zarubin. 14(2), 521–2(C) (Aug. 1972); CPM-7208E0678

Zarubina, O. A.—Superconductivity of Lanthanum at Pressures up to 250 kbar (E)—O. A. Zarubina. 14(10), 2497–9 (Apr. 1973); CPM-7304E1143

Zashkvara, V. V.—Ionization Losses in Spectra of Inelastic Electron Reflection from Rare Earth Metal Surfaces (E)—E. V. Tsveiman, V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin, S. Tazhibaeva and S. S. Kiseleva. 14(5), 1333–5(C) (Nov. 1972); CPM-7211A1585

—Characteristic Energy Loss Spectra of Electrons from La, Ce, Pr, and Nd Surfaces (E)—V. V. Zashkvara, E. V. Tsveiman, M. I. Korsunskii and V. S. Red'kin. 14(6), 1564–6(C) (Dec. 1972); CPM-7212D0900

—Interpretation of the Energy–Loss Peaks in the Range 30–70 eV in the Spectra of Electrons Reflected from Transition Metals (E)—V. V. Zashkvara, M. I. Korsunskii, V. S. Red'kin and K. Sh. Chokin. 14(7), 1891–2(C) (Jan. 1973); CPM-7301C0851

—Interpretation of Some Features of Plasma Loss Peaks in the Spectra of Electrons Reflected from Mo (E)—V. V. Zashkvara and V. S. Red'kin. 14(9), 2410–1(C) (Mar. 1973); CPM-7303E1234

Zavada, V. P.—Photoionization Spectra of Impurity Centers in α SiC(6H) at High Temperatures (E)—I. S. Gorban', V. P. Zavada and A. S. Skirda. 14(10), 2652–3(C) (Apr. 1973); CPM-7304E1298

Zavadskii, É. A.—Magnetic Transformation in Manganese Arsenide Induced by a Strong Magnetic Field (E)—A. A. Galkin and É. A. Zavadskii. 14(6), 1507–9 (Dec. 1972); CPM-7212D0843

Zavadskii, Z. A.—Some Features of a Magnetic Transition in Chromium Telluride (E)—A. A. Galkin, Z. A. Zavadskii and B. Ya. Sinel'nikov. 14(1), 125–9 (Jul. 1972); CPM-7207D1084

Zavt, S. G.—Surface Electronic States in a KCl Crystal (T)—S. G. Zavt and T. Ya. Saks. 14(10), 2502–4 (Apr. 1973); CPM-7304E1148

Zayachkovskii, M. P.—Conductivity, Thermoelectric Properties, and Band Structure of Crystalline BiSeI (E/T)—D. M. Bercha and M. P. Zayachkovskii. 14(3), 766–7(C) (Sep. 1972); CPM-7209D0200

Zazubovich, S. G.—Ionization of In^+ and Tl^+ Centers in KCl and KBr Crystals by Interstitial Halogen Atoms (E)—I. K. Vitol, V. Ya. Grabovskis, S. G. Zazubovich and Ch. B. Lushchik. 14(4), 894–8 (Oct. 1972); CPM-7210D0709

Zeinally, A. Kh.—Influence of Nonequilibrium Carriers on the Domain Structure of the Ferroelectric Semiconductor SbSI (E)—B. S. Agaronov, N. M. Bezdetnyi, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(1), 205–6(C) (Jul. 1972); CPM-7207D1164

—Characteristics of the Photoelectric EMF of SbSI (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(2), 477–8(C) (Aug. 1972); CPM-7208E0634

—Photodomain Effect in Naturally Polarized SbSI Crystals (E)—N. M. Bezdetnyi, G. Z. Gorbatov, A. Kh. Zeinally, N. N. Lebedeva and M. K. Sheinkman. 14(3), 789–90(C) (Sep. 1972); CPM-7209D0223

—Pleochroism in SbSI Associated with the Domain Structure (E)—A. Kh. Zeinally, A. M. Mamedov and Sh. M. Efendiev. 14(8), 2106–7 (C) (Feb. 1973); CPM-7302E1232

Zemskii, V. L.—Forbidden Indirect Transitions in Germanium Subjected to a Magnetic Field (E)—V. I. Zemskii. 14(1), 217–8(C) (Jul. 1972); CPM-7207D1176

Zevin, V. Ya.—Localized and Quasilocalized Vibrations in Anharmonic Raman Spin–Lattice Relaxation (T)—V. Ya. Zevin and V. I. Konovalov. 14(3), 738–42 (Sep. 1972); CPM-7209D0172

—EPR Line Shape in the Presence of the Spin–Phonon and Static Portions of Dipole–Dipole Interactions (T)—B. E. Vugmeister, V. L. Gokhman and V. Ya. Zevin. 14(9), 2280–4 (Mar. 1973); CPM-7303E1104

Zezin, S. B.—Effective Magnetic Fields at the Diamagnetic Tin Atoms in $MnSn_2$ (E)—V. A. Golovnin, S. B. Zezin and R. N. Kuz'min. 14(5), 1313–5(C) (Nov. 1972); CPM-7211A1565

Zhdan, A. G.—Switching Effect in Pyrolytic VO_2 Films (E)—A. G. Zhdan, A. S. Darevskii, M. E. Chugunova and I. A. Serbinov. 14 (7), 1879–80(C) (Jan. 1973); CPM-7301C0839

Zhdanov, S. K.—Anisotropy of the Energy Spectra of Electrons Emitted as a Result of Proton Bombardment of Molybdenum (E/T)—L. B. Begrambekov, S. K. Zhdanov and V. G. Tel'kovskii. 14(12), 3075–6(C) (Jun. 1973); CPM-7306D0917

Zhdanova, V. V.—Thermal Expansion of ZnSe in the Temperature Range 100–600°K (E)—V. V. Zhdanova and V. P. Sergeev. 14(7), 1859–61(C) (Jan. 1973); CPM-7301C0819

Zheltov, Yu. V.—Densities of Quantum States for the Elements and Their Compressibilities (T)—Yu. V. Zheltov and L. D. Sokolov. 14 (11), 2784–6 (May 1973); CPM-7305D1012

Zhetbaev, A. K.—Mössbauer Effect in Impurity Atoms of Fe^{57} in Quartz Single Crystals (E)—M. F. Vereshchak, A. K. Zhetbaev, D. K. Kaipov and K. K. Satpaev. 14(10), 2638–9(C) (Apr. 1973); CPM-7304E1284

Zhevago, S. E.—Fermi Surface of Cadmium under Pressure (E)—A. A. Galkin, E. P. Degtyar', S. E. Zhevago and A. I. Popovich. 14 (3), 787–8(C) (Sep. 1972); CPM-7209D0221

Zhevno, A. N.—Hybridization of the Atomic Orbitals at Structural Defects in Si (T)—A. N. Zhevno, V. F. Stel'makh and V. D. Tkachev. 14(4), 1007–11 (Oct. 1972); CPM-7210D0822

Zhilich, A. G.—Coulomb Excitons in Semiconductors and Screening of Exchange Interaction (T)—V. A. Kiselev and A. G. Zhilich. 14 (5), 1233–5 (Nov. 4972); CPM-7211A1485

Zhitnikov, R. A.—Mechanism of Radiation-Induced Coloring of KCl:Ag Crystals (E/T)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(3), 753–6 (Sep. 1972); CPM-7209D0187

—Investigation of Silver Atoms in Mixed Alkali Halide Crystals (E)—N. I. Mel'nikov, R. A. Zhitnikov and P. G. Baranov. 14(6), 1488–92 (Dec. 1972); CPM-7212D0824

—Off–Center Position of Mn^+ Ions in KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov, N. I. Mel'nikov and N. G. Romanov. 14(7), 1842–3(C) (Jan. 1973); CPM-7301C0802

—Acentric Position of Silver Anions in a KCl Crystal (E)—P. G. Baranov, R. A. Zhitnikov and N. I. Mel'nikov. 14(7), 1876–8(C) (Jan. 1973); CPM-7301C0836

Zhizhin, G. N.—Vibrational Spectra of Organic Crystals Near Phase Transition Points (E)—G. N. Zhizhin, E. L. Terpugov, M. A. Moskaleva, N. I. Bagdanskis, E. I. Balabanov and A. I. Vasil'ev. 14 (12), 3028–31 (Jun. 1973); CPM-7306D0870

Zhukova, T. B.—Thermal Conductivity of Polymeric Modifications of Nd_2S_3 (E)—I. A. Smirnov, L. S. Parfen'eva, V. M. Sergeeva and T. B. Zhukova. 14(8), 2142–3(C) (Feb. 1973); CPM-7302E1268

Zil'berman, L. A.—Conducting State of Metals with Nonmagnetic Impurities (T)—L. A. Zil'berman and Yu. M. Ivanchenko. 14(5), 1164–8 (Nov. 1972); CPM-7211A1416

Zil'berman, P. E.—Electromagnetic Excitation of Sound in Semimetals in Moderately Strong Magnetic Fields (T/E)—P. E. Zil'berman and V. V. Pavlovich. 14(2), 504–6(C) (Aug. 1972); CPM-7208E0661

—Effect of a Strong Electric Field on the Interaction of Electrons with High–Frequency Ultrasound (T)—P. E. Zil'berman and A. G. Mishin. 14(3), 771–2(C) (Sep. 1972); CPM-7209D0205

Zimkin, I. N.—Mechanical Properties and Dislocation Structure of Alkali Halide Crystals in Single Slip (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(2), 487–9(C) (Aug. 1972); CPM-7208E0644

—Influence of a Dislocation Forest on the Parameters of the Dislocation Structure of Slip Bands in LiF Crystals (E)—I. N. Zimkin, T. V. Samoilova and B. I. Smirnov. 14(6), 1585–7(C) (Dec. 1972); CPM-7212D0921

Zimkina, T. M.—New X-Ray Emission Bands of Sn, Sc, Re, and Os in the Wavelength Range 90–900 Å (E)—A. S. Shulakov, V. A. Fomichev and T. M. Zimkina. 14(10), 2644–5(C) (Apr. 1973); CPM-7304E1290

Zingerman, Ya. P.—Investigation of the Sorption of Oxygen on Tungsten by the Ionization of Molecular Beams (E)—Ya. P. Zingerman. 14(1), 236–8(C) (Jul. 1972); CPM-7207D1195

Zinov'ev, V. E.—Kinetic Properties and Electron Scattering Mechanisms of Ti, Zr, and Hf at High Temperatures (T/E)—V. E. Zinov'ev, S. I. Masharov, L. I. Chupina and P. V. Gel'd. 14(4), 902–5 (Oct. 1972); CPM-7210D0717

—High–Temperature Transport Properties of Gadolinium (E)—V. E. Zinov'ev, L. P. Gel'd, G. E. Chuprikov and K. I. Epifanova. 14(9), 2372–4(C) (Mar. 1973); CPM-7303E1196

—Transport Properties of Scandium at High Temperatures (E)—V. E. Zinov'ev, L. I. Chupina and P. V. Gel'd. 14(9), 2416–8(C) (Mar. 1973); CPM-7303E1240

Zinov'eva, G. P.—Elastic Constants of Iron Digermanide (E)—G. P. Zinov'eva, A. V. Mikhel'son, L. P. Andreeva, R. P. Krentsis and P. V. Gel'd. 14(5), 1364–7(C) (Nov. 1972); CPM-7211A1616

Zolotarev, V. M.—Spectroscopic Method for Determining the Sorption and Porosity Properties of Thin Solid Films (E)—A. F. Perveev, G. A. Muranova and V. M. Zolotarev. 14(10), 2510–2 (Apr. 1973); CPM-7304E1156

Zolotovitskii, Ya. M.—Experimental Investigation of the Frequency Dependence of Photoelectric Emission from Metals (E)—S. D. Babenko, T. S. Rudenko, V. A. Benderskii and Ya. M. Zolotovitskii. 14(12), 2950–2 (Jun. 1973); CPM-7306D0792

Zolotukhin, I. V.—Internal Friction and Relative Value of Young's Modulus of Niobium in Normal and Superconducting States (E)—V. S. Postnikov, I. V. Zolotukhin and V. E. Miloshenko. 14(3), 809–10(C) (Sep. 1972); CPM-7209D0243

—Structure of Small–Angle Torsion Boundaries in the (001) Plane (E)—V. S. Postnikov, K. S. Solov'ev, V. M. Ievlev, I. V. Zolotukhin and Yu. K. Netusov. 14(5), 1311–2(C) (Nov. 1972); CPM-7211A1563

—Influence of Defects on the Internal Friction in Superconductors near the Normal–Superconducting Transition (E)—V. S. Postnikov, V. E. Miloshenko, I. V. Zolotukhin, G. E. Shunin and E. I. Shukhalov. 14(11), 2911(C) (May 1973); CPM-7305D1139

Zorin, R. V.—Two–Dimensional Magnetic Ordering in $BaMnF_4$ (E)—R. V. Zorin, B. I. Al'shin, D. N. Astrov and A. V. Tishchenko. 14(10), 2661–2(C) (Apr. 1973); CPM-7304E1307

Zubenko, V. V.—Character of the Structural Phase Transition Accompanying the Magnetic Transformation in the Ferrite $NiFe_{0.8}Cr_{1.2}O_4$ (E)—V. A. Gordienko, V. V. Zubenko, V. I. Nikolaev and S. S. Yakimov. 14(2), 530–2(C) (Aug. 1972); CPM-7208E0687

Zubenko, Yu. V.—Adsorption of Barium on Platinum (E)—Yu. V. Zubenko. 14(2), 377–9 (Aug. 1972); CPM-7208E0534

Zubkova, S. M.—Exciton Energy Spectra in Crystals of the Diamond and Sphalerite Types (T)—S. M. Zubkova and K. B. Tolpygo. 14 (6), 1514–7 (Dec. 1972); CPM-7212D0850

Zuev, L. B.—Inelastic Phenomena in Sodium Chloride Whiskers (E)—L. B. Zuev, V. D. Mal'tsev, L. M. Vysoven' and V. A. Stupin. 14(4), 1096–7(C) (Oct. 1972); CPM-7210D0911

—Influence of Space Charge on the Strength of Small–Angle Boundaries in LiF Crystals (E)—L. B. Zuev, N. K. Doroshenko, V. M. Finkel' and L. N. Kaminskaya. 14(8), 2104–5(C) (Feb. 1973); CPM-7302E1230

Zuev, V. E.—Broadening of a Ferromagnetic Resonance Line by Chemical Magnetic Inhomogeneities (E)—A. A. Manuilova, V. E. Zuev, S. P. Stanishevskaya and V. Ya. Dubossarskaya. 14(9), 2365–6(C) (Mar. 1973); CPM-7303E1189

Zusman, L. D.—Effect of Resonance Interaction on Line Profile (T)—L. D. Zusman. 14(5), 1207–11 (Nov. 1972); CPM-7211A1459

Zvezdin, A. K.—Domain Structure of Orthoferrites near the Spin Reorientation Temperature and Its Effect on the Phase Transition (E/T)—A. K. Zvezdin and S. G. Kalenkov. 14(10), 2458–61 (Apr. 1973); CPM-7304E1104

Zvyagin, A. I.—Optical–Phonon Spectrum of the Antiferromagnetic Semiconductor MnTe (E)—L. V. Povstyanyi, V. I. Kut'ko and A. I. Zvyagin. 14(5), 1346–7(C) (Nov. 1972); CPM-7211A1598

—Far-Infrared Absorption Spectrum of Antiferromagnetic Nickel Tungstate (E)—V. I. Kut'ko, V. M. Naumenko and A. I. Zvyagin. 14(11), 2900–1(C) (May 1973); CPM-7305D1128
—Electron Spin Resonance of Gd^{3+} in $CsEu(MoO_4)_2$ and $CsY(MoO_4)_2$ (E)—A. I. Otko, L. N. Pelikh and A. I. Zvyagin. 14 (11), 2918(C) (May 1973); CPM-7305D1146

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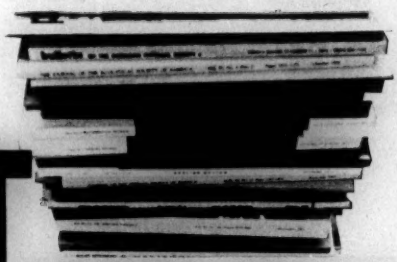

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